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A CONFERENCE WAS HELD IN CONNECTION WITH THE SOCIAL SCIENCE EDUCATION CONSORTIUM (SSEC) TO PROVIDE AN EXCHANGE OF IDEAS ABOUT APPROACHES TAKEN TO SOCIAL SCIENCE CONTENT IN NEW CURRICULUMS. THE CONFERENCE WAS PLANNED IN THE HOPE THAT SUCH AN EXCHANGE WOULD CONTRIBUTE TO THE IMPROVEMENT OF THE GROWING AMOUNT OF ACADEMICALLY BASED CURRICULUM WORK IN THE SOCIAL SCIENCES, BY CROSS-FERTILIZATION OF DISCIPLINES AND PROJECTS AND BY SHARPENING BOTH HINDSIGHT AND FORESIGHT ON THE BEST APPROACHES TO CURRICULUM CONTENT. CONFERENCE SPEAKERS REPRESENTED A BROAD RANGE OF DISCIPLINES AND A NUMBER OF DIVERSE APPROACHES TO CURRICULUM CONTENT. A HISTORIAN AND A GEOGRAPHER SPOKE OF NEW DEVELOPMENTS IN THEIR OWN FIELDS, AND CONSIDERED THE QUESTION OF WHETHER THE BROADENING CURRICULUM ACTIVITIES OF ALL THE SOCIAL SCIENCES ARE COMPETITIVE WITH OR COMPLEMENTARY TO THE LONG-ESTABLISHED PLACES OF SOCIAL SCIENCES IN THE CURRICULUM. FIVE PERSONS WHO HAVE WORKED INAND STRUCTURE. TWO PHILOSOPHERS OF SC BASED PRIMARILY OR ENTIRELY ON NONTRADITIONAL SOCIAL STUDIES CONTENT PRESENTED THEIR APPROACHES TO SOCIAL SCIENCE CONTENT AND STRUCTURE. TWO PHILOSPHERS OF SCIENCE DISCUSSED "CONCEPTS," "STRUCTURE OF KNOWLEDGE," "FACTS," AND "VALUES." A CHILD DEVELOPMENT PSYCHOLOGIST ANALYZED THE CONFERENCE DISCUSSIONS IN THE LIGHT OF HIS FAMILIARITY WITH THE SEQUENCING AND ACQUISITION OF CONCEPTS AND THE LEARNING OF STRUCTURE. PARTICIPANTS IN THE CONFERENCE WERE CURRICULUM PROJECT PEOPLE, SOCIAL SCIENTISTS, UNIVERSITY EDUCATORS, TEACHERS, CURRICULUM DIRECTORS, AND SCHOOL ADMINISTRATORS. CONFERENCE REACTIONS OF THE PARTICIPANTS WERE VERY FAVORABLE. THIS PAPER WAS WRITTEN AS PART OF THE SSEC, A CURRICULUM PROJECT DESIGNED TO OUTLINE THE CONCEPTS, METHODS, AND STRUCTURE OF SEVERAL OF THE SOCIAL SCIENCES FOR USE BY TEACHERS AND CURRICULUM WORKERS AT ALL GRADE LEVELS. (JH)

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CONCEPTS AND STRUCTURE IN THE NEW SOCIAL SCIENCE CURRICULA

Irving Morrissett, Editor
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CONCEPTS AND STRUCTURE
IN THE NEW SOCIAL SCIENCE
CURRICULA

Irving Morrissett, Editor
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FOREWORD

The research for, and writing of, this paper was supported in part by a contract of the United States Office of Education with Purdue University for the Social Science Education Consortium.

While the author's position does not represent an official view of the Consortium, support of this work is an indication of the Consortium's profound interest in improving both the theory and the practice of evaluation of teaching methods and materials in the social sciences. The rate of innovation in social science education has, fortunately, turned sharply upward in the last two or three years. Methods of evaluation, inadequate to begin with, have shown little improvement.

Among the purposes of the Social Science Education Consortium is the intent to encourage basic, applied and comparative work on evaluation of social science teaching methods and materials. This paper is a contribution to basic research on the methodology of evaluation.

Irving Morrissett

March, 1966

FOREWORD

Most of the new social science curriculum projects have begun their work with an intensive and sometimes prolonged study of the subject matter to be included in the curriculum. A number of outstanding scholars in the various social sciences have participated in these inquiries. The subject matter that has been analyzed and selected for use in the curriculum is often referred to as "Concepts," "Fundamental Ideas," "Basic Concepts," "System of Concepts," "Structure," and "Structure of Disciplines."

School curriculum committees and educators have for many years undertaken a similar task, publishing dozens of "Scope and Sequence" charts and hundreds of lists of "Understandings." But the new professionally-oriented and discipline-oriented projects, staffed in part and aided extensively by social scientists, financed by government agencies and foundations, and intent upon a more academic approach to social studies, have thus far published very few of their "Understandings." (A notable exception is Roy A. Price, Gerald R. Smith, and Warren L. Hickman, Major Concepts for the Social Studies, Social Studies Curriculum Center, Syracuse University, 1965.)

There is, of course, a question as to whether "Understandings," "Concepts," or "Structure" should be an explicit element in the construction and presentation of curriculum materials. Some have felt that such an emphasis leads to atomization, dehydration and stultification--a diversion from the "Processes," "Discovery," "Inquiry," and "Mature Understanding" that many projects stress.

On the other hand, most projects have felt the necessity for exploring at the beginning of their work the content to be included in their curricula. Without prejudging the question of whether concepts or structure should be an explicit part of either classroom materials or teacher-training materials, the Social Science Education Consortium has felt that there could be great value in an early exchange of ideas among project workers about approaches taken to social science content in the new curricula. Such an exchange was the task proposed for the conference reported here, in the hope that it will contribute to the improvement of the large and growing amount of academically-based curriculum work, by cross-fertilization of disciplines and projects and by sharpening both hindsight and foresight on the best approaches to curriculum content.

Speakers for the conference were selected to represent a broad range of subjects and a number of diverse approaches to curriculum content. A historian and a geographer spoke about new developments in their own fields, and considered the question of whether the broadening curriculum activities of all the social sciences are competitive with or complementary to their own long-established places in the curriculum. Five persons who have worked intimately with creative projects based primarily or entirely on non-traditional social studies content presented their approaches to concepts and structures.

Experts from two important complementary disciplines contributed to the conference. Two philosophers of science brought their expertise to bear on the conference discussions of "Concepts," "Structure of Knowledge," "Facts," and "Values." A child development psychologist analyzed the conference discussion in the light of what he and his colleagues know about the sequencing and acquisition of "Concepts" and the learning of "Structure."

Responses to our invitations to the conference were enthusiastic, and reactions of participants after the conference, both verbal and written, were still more enthusiastic. I think these responses can be attributed largely to the great need that is felt for confrontations of the kind that were possible at the conference--among curriculum project people, social scientists, university educators, teachers, curriculum directors and school administrators. I hope this record of the meeting has captured, in readable form, both the expositions and the confrontations that made the conference both rich and memorable for those who attended it.

Providing a record of the conference discussions posed the greatest problem for the editor. The decision to present it in dialogue form was influenced primarily by his reluctance to bury colorful phrases and clashing opinions in indirect discourse. The price of this color is paid in occasional discontinuities that shoot off like tracks in a cloud chamber. But as conference chairman, the editor was able to exercise some ad hoc control over the discussion, and as editor he could add post hoc control--mostly to reduce the volume of words, to a lesser extent to rearrange content.

I am grateful to several conference participants for their assistance in editing various parts of the proceedings. The time available before it was necessary to complete this report was not sufficient to allow the speakers to revise and edit their talks as some would have liked, nor to have the discussion chapters reviewed by participants. The editor assumes full responsibility for all of the things reported herein which participants did not say, did not mean, or wish they had not said.

March 1966

Irving Morrissett

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CHAPTER 1

THE NEW SOCIAL SCIENCE CURRICULA

Irving Morrissett
Purdue University

Concepts

A concept is an abstraction--an idea generalized from particular cases. Abraham Kaplan has described a concept as "a prescription for organizing the materials of experience so as to be able to go about our business. ...What makes a concept significant is that the classification it institutes is one into which things fall, as it were, of themselves. It carves at the joints, Plato said."[1] A useful concept should identify a cluster of properties that usually go together and that have a meaningful relationship to each other. An example of a concept that is not very useful is "epilepsy," a term that groups a number of particular instances that have only the superficial symptom of seizures in common, and that differ in their more significant characteristics. This example suggests that concepts may serve purposes beyond that of mere description. We want a definition that "carves at the joint," for example, so that the dinner host, employing the concept of "thigh" to guide his attack on the roast chicken, will avoid chopping at the midpoint of the femur.

Concepts are commonly used in constructing curricula. When the objectives of a curriculum or a unit are stated, the understanding of certain ideas, or concepts, is usually included. The listing is selective: "key" ideas or concepts are chosen. The objectives may include, for example, an understanding of "measurement," "society," "fairness," "subtraction," or "economic system." Whether the concepts are useful depends on something beyond their customary acceptance and their teachability; it depends on their relationship to a larger body of knowledge.

Concepts are the basis for any scheme of classification. Classification, or taxonomy, is a prominent part of every curriculum, particularly in the early grades. It is important for teachers and children to understand the role that concepts and classification play in learning. "Every taxonomy, Kaplan wrote, "is a provisional and implicit theory."[2]

Structure

Structure is the arrangement and interrelationship of parts within a whole. A structure can refer to the relationship of concepts to each other; for example, the concepts of "money" and "spending" may be related to each other in a structure called "an economic system." Conversely, a concept may itself have a structure. We can think of "an economic system" as a concept, and we can investigate its structure--its parts (including "money" and "spending") and their relationships to each other.

A typical social studies unit has a list of objectives to be achieved, or understandings to be learned. I have frequently applied to these lists what I call "the shuffle test for structure." The test is applied by shuffling the individual items in the list and then making a judgment about whether anything was lost in the process. If there is no noticeable difference in the usefulness of the list after the shuffling, the test indicates that the original list was without structure. Whether a lack of structure in the list of objectives means that there is a corresponding lack of structure in the materials themselves can be debated; it can also be investigated. I suspect that failure to pass the shuffle test frequently indicates that the accompanying curriculum materials contain isolated, unstructured pieces of content.

The ordering of units within a social studies course may also fail to pass the shuffle test, though perhaps less frequently than is the case with the objectives of a unit. If units are ordered chronologically, as in many history courses, the structure will be lost in the shuffle test; but it is an open question whether chronological ordering provides a useful structure. Units may also be ordered according to the spiral theory, which says that children learn best if they start with content closest to themselves and move outward into the wide world. The spiral theory is widely accepted, but largely untested.

What is new in "the new social studies curricula" is increasing emphasis on a new kind of structure that is different from chronology and from the spiral theory. The new structure is the scientific structure of the social science disciplines.

Theory

A theory is a general statement about relationships among facts. The facts that are a part of a theoretical statement are not isolated facts, but idealized facts; they have been organized into concepts. A theory is a structure of concepts; it states a relationship--often a causal relationship--among the concepts.

It was a great insight of Kant that "concept formation and theory formation go hand in hand."[3] Concepts are the building blocks of theories, and therefore good theories depend on good concepts. To pursue the analogy of Plato with which we began, it would be difficult to devise a good theory about the mechanics of how a chicken runs, without the concept of "joint." But the discovery of good concepts is, conversely, dependent on good theories. At the risk of pursuing the poultry analogy too far, we can note that this is the familiar chicken-and-egg problem.

The solution to the dilemma is, of course, a process of successive approximation, in which better theories lead to better concepts and better concepts lead to better theories. An important corollary is that we must be willing to discard old theories for new and old concepts for new.

It is the essence of theory that it organizes and simplifies the profusion of facts in the world. "Nature must be much simpler than she looks to us," said the eminent biologist Albert Szent-Györgyi. "To the degree to which our methods become less clumsy and more adequate, things must become not only clearer, but very much simpler, too. Science tends to generalize, and generalization means simplification."[4] At a low level of generalization, concepts simplify facts; at a high level of generalization, theories simplify facts.

Structure and Theory in the Curriculum

In his much-quoted book, The Process of Education,[5] one of Bruner's two major themes is that elementary and secondary education should make much greater use of the structure of the disciplines. (The other major theme is that we can begin to teach that structure in the very early years.) The principal reason he gives for the increased use of structure is very compelling: it simplifies the process of learning. Simplification is achieved in four ways: structure makes a subject more comprehensible; it facilitates memory of a subject; it contributes to transfer of learning from one subject to another; and it facilitates intuitive thinking.

Bruner scarcely mentions "theory" in The Process of Education, and one can surmise that he had two reasons for this omission. One reason could be that he did not want to frighten the people whom he wants to influence. The other could be that he wanted to emphasize the importance of many generalizations and relationships that belong to the theory family but are not complex enough to be called theories. Clearly he had in mind theories, or parts of theories, or incipient theories. His examples of structure include exercises in constructing units of measurement, in relating the Triangular Trade of the American colonies to the general need of people to trade, and in locating hypothetical cities on an unfamiliar map which shows only physical features.

Joseph Schwab has also stressed the importance of teaching the structure of disciplines. He argues that they should be a part of the curriculum; and, even more significant, that

> they are important to teachers and educators: they must be taken into account as we plan curriculum and prepare our teaching materials; otherwise, our plans are likely to miscarry and our materials, to misteach.[6]

Science can no longer be considered a process of gathering, reporting, and summarizing facts, Schwab says. Progress in science depends on conceptions, on deliberate constructions of the mind. The conceptions tell us what facts to look for; it is impossible to look at everything. They also tell us how to interpret the facts; and the facts, when we try to fit them into our structures, may tell us that we should modify our structures.

Like Bruner, Schwab seems to shy away from "theory." He speaks freely of "principles," "laws," "patterns," "bodies of knowledge," "truth," and "inquiry," but avoids the terms "theory" and "theorizing." Structure, as Schwab defines it, is a part of the process of theorizing; but Schwab is clearly talking about theories and theorizing. His arguments for the use of the structure of disciplines are rich with examples drawn from theory--from biology and modern physics, for example.

Lawrence Senesh has been developing his "organic curriculum" since 1959.[7]

The organic curriculum is a well-articulated structure of concepts and relationships, based primarily on economics but embracing more of the social sciences as the basic idea has grown and been incorporated into curriculum materials. The curriculum is "organic" in two senses. Like a plant, it has a structure that matters; it can pass the "shuffle test." And, like a plant, it grows, beginning in the early years with a structure that contains the most important elements of the subject in simplified form, and growing in depth and complexity through successive grades.

Unlike Bruner and Schwab, Senesh has not been shy about mentioning "theory." The organic curriculum is intended to be a theoretical structure, in tune with up-to-date substantive and methodological findings in the social sciences.

Structure and Theory in the New Social Science Curricula

The major emphasis of the new social science curricula, as of the new curricula in the natural and physical sciences, is on the theory and methods of science--or on the concepts and syntax of the disciplines, as Schwab has put it. This is true of the Anthropology Curriculum Study Project, at the high school level; the elementary anthropology projects at Educational Services Incorporated and the University of Georgia; the "episodes" under development by Sociological Resources for Secondary Schools; the Developmental Economic Education Program of the Joint Council on Economic Education; the Senesh elementary economics program; the San Jose Economics 12 program; the high-school economics program at Ohio State University; the University of Chicago's Elementary School Economics program; the University of Michigan's elementary Social Science Education Program; the eclectic Projects Social Studies at the Universities of Illinois and Minnesota; and others. One could characterize some of these projects as putting more emphasis on teaching theoretical content, others as stressing the methods of investigation--"doing what scientists do."

The situation is somewhat different with the new geography and history projects. These disciplines have never claimed a theoretical body of knowledge in the same sense as those possessed, or being developed by the natural, physical, and social sciences. The High School Geography Project is making use of those limited bodies of theory which it shares with other disciplines--particularly location theory, which it shares with economics, and cultural anthropology. To a greater extent, it is stressing the methods of geographers, particularly methods of observing and classifying natural phenomena, and methods of studying the effects of physical environment on the historical development of man.

The projects which are oriented primarily to history, at Carnegie Tech, Amherst, Northwestern and Educational Services Incorporated, making no claim to a body of theory, have gone all-out on methods of investigation. They are presenting their students with a fascinating array of original documents--diaries, news stories, maps, contemporary accounts, and so on--and challenging them to analyze and interpret them. Both deduction ("Do the documents support the judgments of history?") and induction ("What do you make of the evidence?") are encouraged, with induction a somewhat more popular approach.

Concepts in the Syracuse Project

A very useful contribution to conceptualization of the social sciences for curriculum purposes has been made by the Social Studies Curriculum Center at Syracuse University. Midway in its five-year project, it has recently published a booklet describing thirty-four concepts selected by its project workers and consultants as some of the most significant ideas on which to build elementary and secondary curricula.[8] The list came out of hundreds of pages of background papers and numerous project conferences. One of the concepts, "Conflict--Its Origin, Expression, and Resolution," is elaborated in a 24-page appendix, to show how rich a structure can be built upon one of the concepts.

The Syracuse list is made up of eighteen "Substantive Concepts," including, for example, sovereignty, power, scarcity, habitat, institution and social change; five "Value Concepts," including dignity of man, empathy, loyalty, government by consent, and freedom-and-equality; and eleven "Concepts of Method," including objectivity, interpretation, evaluation and evidence. Most of these concepts cut across two or more of the established social-science disciplines. The list is a challenge to other projects to make available similar work they have done in the course of thinking about curriculum content.

An important purpose of documents such as the Syracuse publication is--like the purpose of this conference--to encourage dialogue early in the process of curriculum development. Let me begin the dialogue by raising a few questions.

First, should "basic ideas or concepts" be identified with "structure"?[9] The book itself has a form of what I would call "structure"--the division of concepts into "substantive," "method" and "value." But it does not discuss the idea of structure. Nor is an effort made to build each group of concepts into a structure (that is, none of the three sections could pass the "shuffle test for structure"); this is a matter that the project will have to deal with when and if it develops an integrated course.

Second, what is the significance of listing "historical method and point of view" and "the geographical approach" as "concepts of method"? I suspect this is evidence that the project made no more progress than have most others in figuring out what is the relationship of geography and history to the (other?) social sciences. One searches the list in vain for a substantive concept to identify with history or geography, as "culture" is related to anthropology, "power" to political science, and "scarcity" to economics. These problems of kinship and paternity, suggested by the Syracuse list, also arise in the following chapters of this report.

Finally, what can be done with the "value concepts"? The book discusses the problem posed by society's conflicting demand that the schools should teach "good citizenship," while avoiding "indoctrination." One can criticize the project for failing to resolve this dilemma with a clear statement of the proper role in the curriculum of its list of values, or of any list of values. But, of course, a clear statement for teaching "good citizenship" (and, therefore, in favor of indoctrinating) or against "indoctrination" (and, therefore, against teaching good citizenship) might bring down even greater criticism.

The intriguing problems of values in the curriculum get much attention in this conference report, but the dialogue with the Syracuse project must be continued elsewhere, since Professor Roy Price, the project director, was prevented by an important prior engagement from attending the conference.

And Then What?

The general agreement on the part of many people in the new curriculum projects to make the social studies more analytical and scientific is the first chapter of what may be a very important book. But it will be a long time before the book is finished and the reviews and sales figures are in.

Many questions will have to be answered before the story is finished. Will there be too much or too little diversity of approaches, in the matters of content versus process, independence versus integration of the disciplines, and the like? Will the available resources for curriculum development be scattered among small and ineffective splinter groups, or dominated by a few monopolistic sources of power? Is there sufficient awareness on the part of the new projects of the desires, needs and limitations of children, teachers and school systems? Assuming that the new projects have worthwhile innovations to offer, how can they help to solve the teacher-training dilemma: that in-service training on a broad front is beyond available resources and institutional possibilities, but that training new teachers to go into an environment that will not support innovations is ineffective? Will parents, school administrators and the public accept important innovations in the social studies--will they allow the scientific method to be applied to morality, religion, national history, sex, economic systems, and the family? Is the general assumption that children can learn more than they are now learning, with the same input of time and effort, a sound assumption? How can we find out whether the new curricula are really better than the old ones?

The story has just begun.

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[1] Abraham Kaplan, The Conduct of Inquiry; Methodology for Behavioral Science (San Francisco: Chandler Publishing Co., 1964), p. 50. I have relied on Kaplan for a number of ideas in the following discussion of concepts and theory.

[2] Ibid., p. 53.

[3] Ibid., p. 52.

[4] Albert Szent-Györgi, "Teaching and the Expanding Knowledge," Science, 4 December, 1964, p. 1279.

[5] Jerome Bruner, The Process of Education (New York: Vintage Books, 1960).

[6] Joseph Schwab, "The Concept of the Structure of a Discipline," The Educational Record, July, 1962, pp. 197-205.

[7] Lawrence Senesh, "The Organic Curriculum: A New Experiment in Economic Education," The Councillor, March, 1960, pp. 43-56.

[8] Roy A. Price, Gerald R. Smith, and Warren L. Hickman, Major Concepts for the Social Studies (Social Studies Curriculum Center, Syracuse University, 1965).

[9] Ibid., p. 3.

CHAPTER 2

CONCEPTS AND THE STRUCTURE OF KNOWLEDGE

Herbert Feigl
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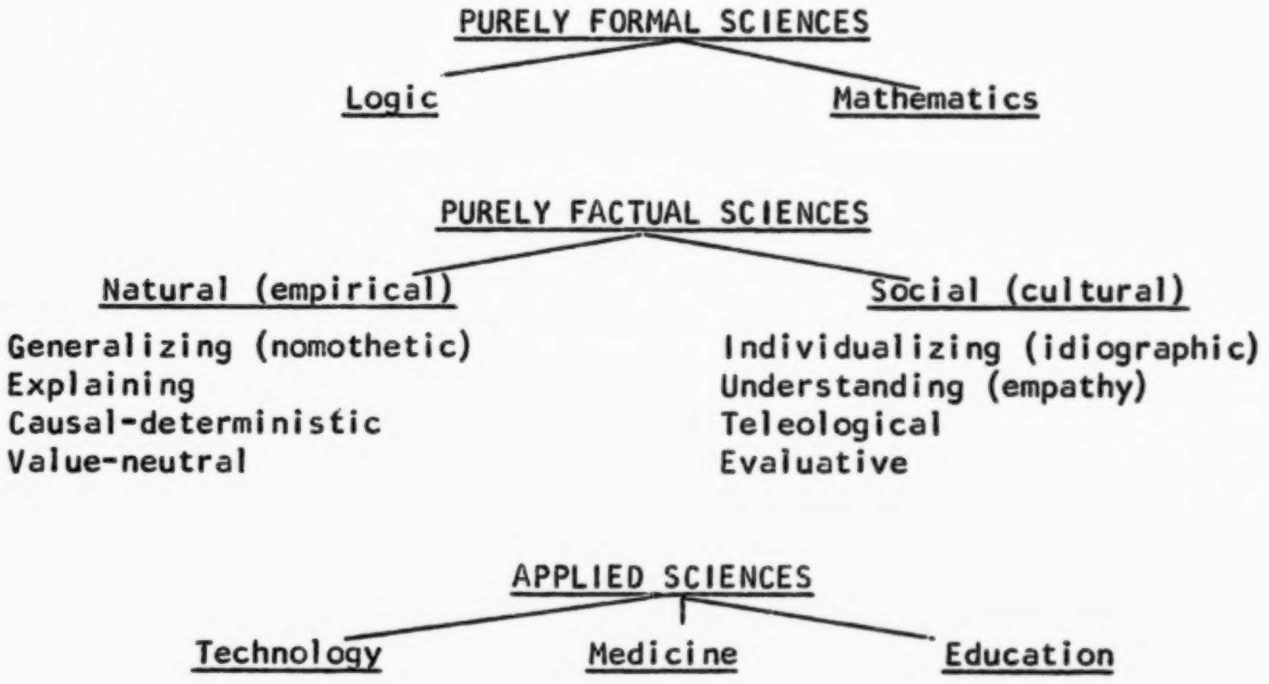
We philosophers are specialists in generalities, so I wish to talk about the nature of concepts, indeed. I would like to approach the whole controversy concerning the nature of scientific concepts by way of an introduction that will serve as a framework for my whole discussion. I have written here a number of things that I don't believe.

Figure 1


PURELY FORMAL SCIENCES
Logic
Mathematics
PURELY FACTUAL SCIENCES
Natural (empirical)
Social (cultural)
Generalizing (nomothetic)
Explaining
Causal-deterministic
Value-neutral
Individualizing (idiographic)
Understanding (empathy)
Teleological
Evaluative
APPLIED SCIENCES
Technology
Medicine
Education

In case you have copied this already, I shall explode it all.

I shall speak from the point of view of what I think is a moderate amount of consensus among recent philosophers of science. I will not try to tell you what we are up to, except to say that the major task that we perceive in the philosophy of science today is not so much trail blazing for future scientific discoveries, or formulating new scientific theories, but understanding science. Science is tremendously complex in our age, requiring a special effort merely to learn to understand it. Hence, philosophic clarification and conceptual analysis are of some significance from an educational point of view.

Now before we approach the all-important issue of concepts and of grasping the meaning of concepts, I should like to make a few remarks on the division of the sciences.

The Division of the Sciences

The purely factual sciences, natural and social, provide the basis for applied sciences. The distinctions made between the sciences are logical, not practical nor historical, for there is tremendous interchange between all of these disciplines. It is perfectly clear that mathematics and some of the purely factual disciplines arose out of practical needs--physics, for instance. On the other hand, advances in mathematics, such as the tensor calculus and matrix algebra, were applied in physics, after first being developed by mathematicians. I'm not saying that there is not, from a psychological, practical, and historical point of view, a great deal of interconnection. I think it makes sense, for the sake of clarification, and especially for such clarification as we might need in the educational enterprise, to make the following distinctions.

The truth claims or knowledge claims of the purely formal sciences do not ultimately rest on experience or observation, as do those of the purely factual sciences. Even on that there is some controversy, but I think you can see that, for example, the word "proof" means two entirely different things. When a mathematician talks about "proof" it is a logical derivation of a conclusion or theorem from a given set of premises, postulates, or axioms. If a chemist tells you, "I can prove it to you in the laboratory," the word "proof" obviously means something entirely different. He tells you, "I can show you. You will be able ultimately to check on my hypothesis or my knowledge claim, by observation, experiment, or statistical design." Ultimately, all of these go back to some form of observation.

I will skip the philosophy of logic and mathematics, vital and interesting though it is, and turn to the division of natural and social sciences. Certain German philosophers, late in the last century and early in this century, established a fashion which, to my regret, has also appeared on the American scene.

In this scheme the natural sciences are characterizing by generalizing, the social sciences by individualizing; the natural sciences by explaining, the social sciences by understanding; and so on, as shown in Figure 1. It is these distinctions that I will criticize.

Generalizing versus Individualizing

We are told that the natural sciences are essentially nomothetic, generalizing, seeking formulae, making statements which tell what happens under what circumstances. The social sciences, by contrast, are individualizing. They are referred to as idiographic, a term derived from the Greek word referring to specific facts and specific individuals; for example, the heroes in history. Special descriptions in history, such as that of the art of the Renaissance or the music of the nineteenth century, are also idiographic, because these are concerned with specific periods of time in which certain types of things happened.

Let us take an extreme case to make the distinction clear. Newtonian mechanics and the law of gravity are generalized laws pronounced universally valid, generalized over all of space and time. However, a good scientist realizes that such a generalization can be valid only until further notice, and can be held only tentatively. In any case, this is the type of knowledge claim made. An historical incident such as you find recorded on certain plaques in New England, "George Washington slept here," is not repeatable. It is nothing that you can experiment about. You can be scientific in ascertaining by scrupulous scrutiny whether George Washington actually slept there. Thus, you can use something like the scientific method in ascertaining historical truth. If you contrast theoretical physics with history, in the sense of a narration about individual events and individual persons, the distinction is quite clear.

Psychologists have, for a long time, tried to formulate laws of human behavior or of mental experience. Psychology has been straddling the fence for a long time. There are branches of psychology which are clearly natural-scientific in approach, such as the psychology of perception; the study of the sense organs; psycho-physiology; and neuro-physiology, to the extent that it sheds any light on psychological phenomena. All this has the makings of a natural science. When we come to the psychology of motivation and when we examine the role of behavior and attitudes of individuals in groups, it looks very much like social science; and the Germans call it "Geisteswissenschaft." In English this means literally "spiritual science," but this would be a misleading word. "Cultural science" is a possible substitute.

Now, there's something badly wrong with this distinction. There are natural sciences which are clearly idiographic, and there are social sciences which are nomothetic. The idiographic-nomothetic distinction won't do. Physical geography, in locating mountains and rivers of the continents, is clearly idiographic. We are told Mount Elbert is the highest mountain in Colorado, and it has a certain latitude and longitude. That's clearly idiographic, just as much as "George Washington slept here." The geography of the moon, or we should say the selenography, has been worked out especially by the scientists. Every mountain on the moon has an astronomer's name on it. That's also clearly idiographic. Geology, to the extent that it traces the history of the surface of the earth and the formations of the mountain ranges, is idiographic. Yet, it is a natural science.

On the other hand, the social sciences, including psychology, have had some success in formulating laws that are highly confirmed by the evidence. Social scientists are making serious, and partly successful, efforts to give us general laws; for instance, mathematical formulations in economics about the functional relations of supply and demand, prices, labor force, and so on. Similarly, sociology, learning theory, and theories of motivation in psychology are nomothetic. Skinner's work in the psychology of learning, his schedules of reinforcements, and the regularities that he has formulated are statistical laws about human behavior and animal behavior. In the light of such knowledge he is able to teach pigeons to perform many tasks. You can see that the idiographic-nomothetic distinction between the natural and social sciences does not hold up.

Explaining versus Understanding

We are told that the natural sciences try to explain, whereas the social sciences strive for understanding in the sense of empathy. Empathy means knowing how a fellow human being feels. Empathy is different from sympathy, which implies affinity and approval.

We are told that empathy is a method of arriving at some of the truths in social psychology, in the psychology of motivation, and in history--in understanding, for example, what historical personalities do at a given juncture of events. Important as is the technique of understanding in this sense of empathy, it is not a method of validation, not a method of justification for knowledge claims. Empathy may be an important source of "hunches," which are very useful in arriving at hypotheses; but empathy is not a means of testing hypotheses. Convictions based on empathy can be terribly wrong. Hypotheses must be tested in science, both natural and social, by a common accepted method in which empathy plays no part.

Science by definition, by its very conception, is intersubjective. I use that word in preference to "objective" because of the numerous definitions of the word "objective." There's subjective objectivity and objective subjectivity. "Intersubjective," I think, is fairly clear. The word is built in analogy to the word "international" or "interracial" or "inter-religious." The idea is that science is intersubjective in the sense that anyone equipped with the necessary intelligence and the requisite apparatus must be able to check up on the knowledge claims of others--of the astonomer, the nuclear physicist, the biologist, the social psychologist, etc. No matter how strong your subjective confiction based on empathy, you can be badly wrong. You still may have to correct your ideas in the light of such intersubjective or objective tests as science has at its disposal.

Causal versus Teleological

The concept of scientific explanation has undergone tremendous changes. You may be familiar with that important transformation in the history of scientific thought which changed the whole concept of scientific explanation. In classical antiquity, a true explanation was one that started with premises which are neither in need of proof nor capable of proof. This was the case, for instance, with mathematical axioms. Nowadays we speak preferably of postulates instead of axioms, of assumptions instead of first principles, but these are just verbal changes. The important thing is the change in attitude that came with the Renaissance with people like Galileo and Newton who introduced the idea of empirical verification of premises.

Explanation is in a twofold way always relative. Its premises are relative to empirical evidence, upon which they ultimately stand or fall. They are relative also in the sense that the premises upon which the explanations are based, themselves remain unexplained within the context of that explanation. If we are lucky, we may find an explanation for these on a higher level.

Let us take a simple example from everyday life. On a cold day I rub my hands to get them warmer. The intelligent child might ask, "Why do they get warmer?" Daddy replies, "Friction always produces heat and this is a case of friction. Hence, you hands get warmer." An ordinary Aristotelian syllogism is the method of explanation here. But then a really inquisitive child might ask, "Why does friction produce heat?" Then Daddy is stumped if he hasn't studied physics. If he has studied physics, he can draw upon thermodynamics and say that mechanical energy in the process of friction is transformed into calories of heat. If the child further asks, "Why is it that mechanical energy can be transformed into heat?" there is still another answer to that, namely, the molecular or kinetic theory of heat. These are the levels of scientific explanation, as we can sketch them, in the natural sciences. This is an exciting subject, and it has been the focal point of many discussions.

It is said that the natural sciences use causal analysis in their explanations. The laws we formulate, especially on the lower levels of scientific explanation, are often causal laws in that they state regularities concerning the sequence of events. Friction and heat, lightning and thunder, the deviation of a magnetic needle near an electric current, are all formulated by using the concepts of cause and effect; thus, many concepts of cause and effect are perfectly good in everyday life, even though philosophers of science still have some important unanswered questions about the nature and meaning of causality. We write equations such as the gas law, PV=RT, a formula which holds to a certain degree of approximation. The formulation is mathematical, but the content is a formulation of empirical regularities. It tells you that if you increase the pressure on the gas, you may decrease the volume or increase the temperature.

The concepts of cause and effect make good sense in the social sciences. Of course, it is often hard to perform a causal analysis. What caused the First World War is a big and complex question. You can't go into the classroom and begin to lecture that the casues of the First World War were such and such. They are a very complex constellation of circumstances. However, it is not impossible, and responsible books have been written about it.

We are told that in the social sciences causal analysis is replaced by the teleological. We ask for explanations by asking the question, not Why? in the sense of what caused it, but, What for? The accusation of being teleological used to be equated with being unscientific, but this view is changing. Biologists, who repudiate teleology as a philosophy, explain the functioning of the heart and liver partly in terms of the functions they perform in the body. There are many such statements in science which sound teleological. We may not want to call them true explanations, but they may state some necessary conditions, thus helping our understanding of how these things work. An important book, Cybernetics, by Norbert Wiener, which appeared in 1948,[1] has finally made clear that we may speak of teleological mechanisms without contradicting ourselves. We may be dealing with systems in which there are interdependencies and feedback, such as with the thermostat in your house. Wiener created a new discipline called cybernetics, a name based on the Greek word for governor. His work has led to some very exciting developments in biology and in physiology, which give us a causal explanation of a very interesting kind. The French call it circular causality. It accounts for homeostatis phenomena, such as the question of why the blood sugar level remains roughly the same.

Homeostasis has also been used by some psychologists. For example, an Austrian psychologist has said that there is a homeostasis in your personal self-concept. If you are criticized or if someone tries to lower your ego concept, you somehow restore it by rationalization. You react to criticism because you like to keep your self-respect on a certain relatively stable level. There is a certain self-adjustment that takes place even in the scholarly world. If you get a bad review of something you have published, you may say to yourself, "The reviewer is an idiot." You protect your self-concept in this way. That is a bit of homeostasis. We have no idea how this works neuro-physiologically; but, conceivably, even that might be explained ultimately by certain brain mechanisms.

Value-Neutral versus Evaluative

We are told that the natural sciences are value-neutral, but that the social sciences are evaluative. I think that is wrong too.

There is no question that we deal with values in the social sciences. Nothing could be more interesting and more important than the evaluations that individual people and certain groups of people make. But such judgments are not made by social scientists, qua scientists. Evaluation depends ultimately on your own personal commitments and is not derivable from factual statements alone. We study evaluations, but that is different from making evaluations. The psychologist studies motivation, and the anthropologist studies the moral codes and values of the Eskimo. But if the anthropologist says that the Eskimos are wrong because they aren't Christians, that is an evaluation made by the anthropologist as an individual, not as a scientist.

Now, let us turn from the alleged differences between the natural and social sciences and take up another important matter.

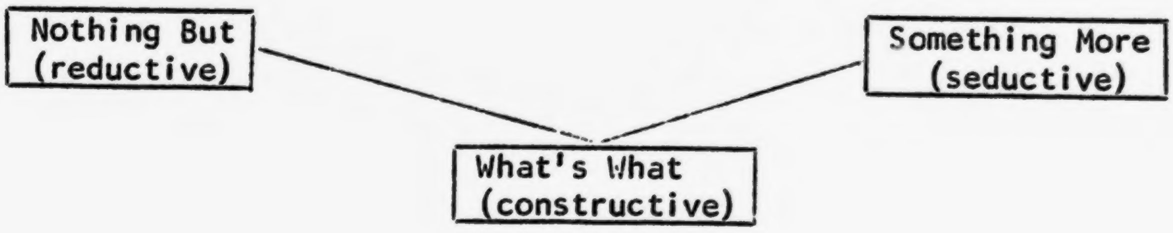
Concepts

There is a classical, fundamental distinction between proper names and concepts. A proper name refers to some particular object. A concept is a generalized notion about objects or ideas. Plato made a metaphysics out of this distinction, declaring that concepts have an existence of their own, in a super-heavenly place far beyond everything that is perceptible. Everything in man's experience is an imperfect copy of these eternal ideas and ideals.

At the other extreme from Plato's idea is the nominalist view, which says that the only really meaningful words are particular words, that is, proper names. This view negates the whole idea of concepts. It will not do, because we know that concepts have a function; they do something useful for our thinking. On the other hand, Plato's metaphysics of ideal concepts with an independent existence in some super-heavenly place is also extreme (although he may have been using poetic license in order to emphasize the contrast between concepts and particular things).

When faced with extreme alternatives of this kind, I often find it useful to use a little dialectic of my own. In the case we are considering, I would call the nominalist view of things a "nothing-but" philosophy; it indulges in the reductive fallacy, failing to see any but the most obvious things. The Platonic view, if taken at face value, illustrates a "something-more" philosophy; it indulges in the seductive fallacy, reaching out for more than is warranted by the facts and the logic of the situation. The synthesis of the two extremes I call the "what's-what's" philosophy; it is constructive, preserving that which is best and most reasonable of the two extreme positions.

Figure 2



This little dialectic is diagrammed in Figure 2. Women's fashions provide another illustration of its use. Bikinis illustrate the "nothing-but" philosophy; Mother Hubbard's the "something-more" view; and decent dress the constructive "what's-what" resolution of the extremes.

In the dispute over concepts, between realistic nominalism and Platonic idealism, my own (constructive) point of view may be summarized as "a concept is what a concept does." Concepts are represented by words and symbols which we use according to certain rules, and we must be careful about understanding and applying these rules. I do not know exactly what word to use to explain the right approach to the use of words and symbols. Operationalism--defining concepts in terms of identifiable and repeatable operations--has been useful, but has led to excesses on the side of the reductive fallacy. Functionalism might be acceptable, if taken to mean a careful statement of the rules according to which we use words and symbols.

A Hierarchy of Concepts

Between the heavenly mysteries of Platonic idealism and the absurdities of nominalism, we can usefully distinguish different levels of generality of the concepts we use. The least general is the descriptive level. Just above the descriptive level, in the hierarchy of generality, are empirical laws, and above these are various levels (as many as three) of theory. These levels can be illustrated by the example given before. The descriptive fact is that I rub my hands, and they get warm. The empirical law is that friction produces heat. Above the empirical law at the first level of theory, there is classical thermodynamics. At the next higher level of theory we have statistical mechanics, or the kinetic theory of heat; and, finally, at the most general theoretical level, quantum mechanics.

As we go up in the hierarchy of theory we encompass more and more facts.

The aim of scientific explanation, the ideal that is guiding us in the search for scientific explanation, is to explain a given set of facts with a minimum of basic concepts and principles. The higher the level of theory, the greater the number of facts that can be explained with a given number of concepts and principles. Newton's laws explain more than Kepler's, and Einstein's more than Newton's.

The social sciences, like the natural sciences, strive to discover high-level theories which will explain many facts with a few simple concepts. An example is the common idea that much of history can be explained by the personalities and abilities of heroes. The Marxian view is almost the opposite; that certain social changes will occur when their time has come, and that people can always be found to fulfill the role of hero. I think the truth lies somewhere in the middle; key individuals occasionally have a remarkable influence on history, but broad social forces are also very important.

In concluding, I am going to apply some of the remarks I made to a question that I know will arise in the course of the conference.

Is History a Science?

What would have happened if I had not had anti-freeze in my radiator when the temperature dropped to 25 below zero? This is a question that can be answered simply and convincingly by an appeal to scientific evidence. What would have happened if Hitler had not been born? This is the same kind of question as the one about my radiator--much more difficult to answer, of course, but not an illegitimate question.

The historian scrutinizes evidence very carefully, reconstructs past events on the basis of currently available evidence, and makes careful inferences. These are scientific endeavors. If, in paleontology, the tracing of the evolution of life on the surface of this planet, is scientific, I do not see why cultural history, the history of art, the history of literature, and the history of music are not also scientific.

Historians are also performing a part of the scientific task when they describe events. Reliable descriptions are important in every science, even though they are, to the philosopher of science, less exciting than theories.

If by science one means the formulation of general, reliable laws, then history has not, so far, been very scientific. However, some historians have attempted to support some generalizations about history. Spengler and Toynbee, for example, have suggested some broad rules about the rise and decline of civilizations. But these attempts are generally precarious, and usually unsuccessful.

One way that I would suggest to improve explanations for historical phenomena would be to use the terms of the various sciences, rather than historical terms. I would look for the roles played in the historical process by economic, sociological, political, and psychological factors. In any case, it is an exceedingly complex problem, but so are many of the problems of the natural sciences, such as in meteorology and astrophysics.

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[1] Norbert Wiener. Cybernetics; or Control and Communication in the Animal and the Machine (Cambridge: Technology Press, 1948).

CHAPTER 3

ORGANIZING A CURRICULUM AROUND SOCIAL SCIENCE CONCEPTS

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For years professional associations and social science educators have defined and redefined the objectives of social studies education. Volumes have been written about all the behavioral changes, all the skill objectives, and all the changes in attitudes that social studies education is expected to achieve. Many of the statements emphasize that the purpose of social studies education is indoctrination of values. The National Council for Social Studies have emphasized for years in their publications that the ultimate goal of education in the social studies is the development of desirable socio-civic behavior and the dedication of youth to the democratic society. Fundamentally, nobody would object to these goals if the students could achieve this behavior through the rational analysis of society. But in most of the statements I read indoctrination of values is emphasized at the expense of analysis.

The Need for Analytical Thinking

The primary function of the development of analytical thinking is to help our youth understand the structure and the processes of our society. With possession of analytical tools, our youth will be able to understand the dynamic changes of our society and the problems created by science and technology. In the final analysis, the purpose of social science education is the development of the problem-solving ability of our students. By acquiring the analytical tools and the skill to apply the tools to the problems, our youth in their later years will feel that they can participate intelligently in the decisions of a free society. The development of the problem-solving ability of our young people will help them to gain respect for social sciences as an organized body of knowledge and will motivate them to choose social science as a professional career. This emphasis is neglected in the guidance programs in our schools.

The correct use of analytical tools and the discovery of the ideas underlying the social process require a particular mode of analytical thinking. The development of analytical thinking requires a long process of conditioning. I advocate that such conditioning start in grade one of the primary grades.

The present social studies program does not offer the proper intellectual framework to develop the analytical faculties of our youth. Social studies educators who have tried to identify generalizations for the social studies curriculum have suppressed the unique characteristics of the individual social science disciplines and formulated concepts so general that they are without analytical content. Since social scientists have not yet achieved a unified theory of society, economists, sociologists, political scientists, and anthropologists observe society from different points of view, and their findings have to be superimposed on each other before social change can be understood. Since all the social science disciplines are necessary to explain social phenomena, the fundamental ideas of all the disciplines should be introduced in the school curriculum. Why not in grade one?

Grade Placement of the Social Sciences

Some academicians interested in the social science curriculum have raised the question many times whether social science instruction should not begin with geography and history. Professor Scriven wrote an article, "The Structure of The Social Studies,"[1] in which he recommends that social science education start with geography and history in grade one. He justifies beginning with history and geography because the generalizations are less "high-falutin'" and nearer to common sense. He would rather introduce a "low-falutin'" approach in the lower grades, hoping that "high-falutin'" understanding will develop later. If you start with "low-falutin'" curriculum, it seems that it remains "low-falutin'". At least, this has been the history of the social studies curriculum.

Professor Scriven does a disservice to geography and history when he assumes that a geographic or historical phenomenon can be explained meaningfully without the aid of the various social science disciplines. Primary school children study Indians and the colonial period, but since they do not possess the fundamentals of economics, political science, sociology, and anthropology, their learning is trivial. It would make more sense if geography and history were culminating courses in high school. In the intervening years the children could have learned the fundamental ideas of the various social sciences, and these would enrich the geography and history courses.

The Organic Curriculum

A team of social scientists has worked with me during the last two years to outline the fundamental ideas of the various social sciences. This team includes Professor David Easton, Political Science Department, University of Chicago; Professor Robert Perrucci, Sociology Department, Purdue University; Professor Paul Bohannan, Anthropology Department, Northwestern University; Professor Peter Greco, Geography Department, Syracuse University; and myself. These fundamental ideas of the various social sciences represent:

a. A logical system of ideas;
b. The cutting edge of knowledge; and
c. An organization of ideas that can be used at every grade level.

Presenting the structure of knowledge in this way challenges popular curriculum practices based on minimum understandings broken up and parceled for different grade levels.

Our team was guided by the awareness that we are training children for an age which we don't even foresee. We are giving the children knowledge that we want them to use in the 21st century. A hundred years ago the idea that our children are a generation ahead was a platitude. Today it is a drama. It is a drama when we realize that parents cannot understand their children when they come home from modern mathematics or modern science classes. We shall soon get to the stage where parents will not understand their children when they talk about the nature of society.

After we had formulated the fundamental ideas of the social sciences, I visited first grade classes. I wanted to find out how many of these fundamental ideas can be related to the first graders' experiences. I found that the children's experience in social matters is potentially so meaningful that the fundamental structure of knowledge can be related to their experience.

After we found out that the structure of knowledge of an individual discipline can be related to the child's experience, we formulated the next question. If we teach all these fundamental ideas in the first grade, what can we teach in the second grade? In the second grade we teach the same structure of knowledge, only now with increasing depth and complexity. What do we teach in the third grade? We use the same structure of knowledge but with still greater depth and complexity, as the child's experience gains in depth and complexity.

On a scope and sequence chart, all concepts are listed vertically, and all grades are shown horizontally. Since every concept is taught in every grade, the scope and sequence chart should show in the first column, for the first grade, very pale checkmarks. In each grade I would increase the intensity of the checkmarks until the darkest color is used for the twelfth grade, indicating that the same concept has been taught with increasing depth and complexity. The question arises as to how this can be done.

How can you teach political science, sociology, economics and anthropology all in one grade, particularly the first grade? This is a new art, I think, which I call the orchestration of the curriculum. Units have to be constructed in such a way that different units give emphasis to the different areas of the social sciences. In some units the sociologist plays the solo role, while the other social scientists play the accompaniment; then the economist is the soloist, then the anthropologist, and so on.

The first element of my approach, taking the fundamental concepts and teaching them with increasing depth and complexity, I call the organic curriculum. I call it the organic curriculum because these concepts are not presented atomistically between grade one and grade twelve. They are introduced all at once and grow with the child, as he moves from grade to grade. I call the second element the orchestration of the curriculum. The child may not know that the sociologist is talking to him, or the economist, or the political scientist, nevertheless he will be exposed to the social science disciplines in an undiluted form.

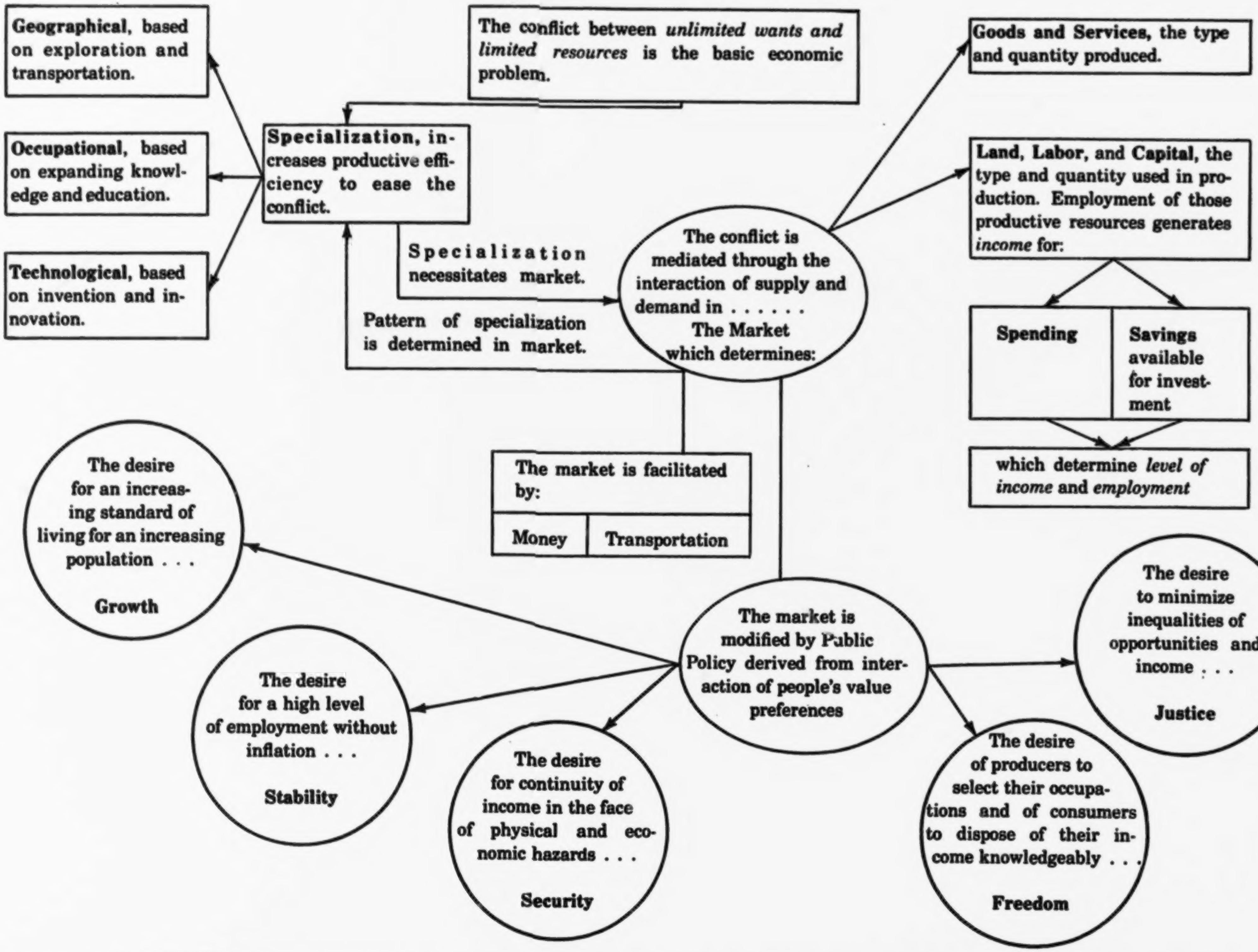
Fundamental Ideas in Economics

The solo role of the economist can be illustrated by the following development of fundamental economic ideas. The same ideas and relationships are shown in chart form in Figure 1.

1. The central idea of economics is the scarcity concept, namely, that every society faces a conflict between unlimited wants and limited resources.
2. Out of the scarcity concept a family of ideas emerge.

Figure 1

FUNDAMENTAL IDEAS OF ECONOMICS



The conflict between *unlimited wants and limited resources* is the basic economic problem.

Specialization, increases productive efficiency to ease the conflict.

Geographical, based on exploration and transportation.

Occupational, based on expanding knowledge and education.

Technological, based on invention and innovation.

Specialization necessitates market.

Pattern of specialization is determined in market.

The conflict is mediated through the interaction of supply and demand in . . . . . .
The Market
which determines:

Goods and Services, the type and quantity produced.

Land, **Labor**, and **Capital**, the type and quantity used in production. Employment of those productive resources generates *income* for:

Spending

Savings available for investment

which determine *level of income* and *employment*

The market is facilitated by:

Money

Transportation

The market is modified by Public Policy derived from interaction of people's value preferences

The desire for an increasing standard of living for an increasing population . . .
Growth

The desire for a high level of employment without inflation . . .
Stability

The desire for continuity of income in the face of physical and economic hazards . . .
Security

The desire of producers to select their occupations and of consumers to dispose of their income knowledgeably . . .
Freedom

The desire to minimize inequalities of opportunities and income . . .
Justice

Because of scarcity man has tried to develop methods to produce more in less time, or more with less material and in shorter time. Various types of specialization were discovered in order to overcome the conflict between unlimited wants and limited resources. We specialize geographically, occupationally, and technologically. The third family of ideas grows out of specialization.

3. Because of specialization, we are interdependent; interdependence necessitates a monetary system and a transportation system. The fourth idea emerges from the first, scarcity, and from interdependence.
4. Men had to discover an allocating mechanism and this is the market, where through the interaction of buyers and sellers price changes occur. Prices determine the pattern of production, the method of production, income distribution and the level of spending and saving, which, in turn, decide the level of total economic activity. The fifth family of ideas grows out of the fact that the economic system is a part of political society.
5. The market decision is modified by public policies, carried out by the government, to assure welfare objectives. These welfare objectives are determined in the United States through the political interaction of 200 million people. The political interaction of these 200 million people generates thousands of welfare objectives which I have reduced to five: our attempt to accelerate growth, our attempt to promote stability, our attempt to assure economic security, our attempt to promote economic freedom, and our attempt to promote economic justice.

These are the fundamental ideas of economic knowledge, which we try to incorporate at every grade level, always with the objective in mind that these analytical tools should help the students analyze the cause of a problem, to measure its scope, to develop some solutions, and to measure the dislocations which have been caused by the attempt to solve it. We try to put the problem in a dynamic context and then see what other dislocations are created.

Teaching Applications of Economics

Now, I would like to present a few ideas on how I relate these economic concepts to the child's experience. The first grade child recognizes the scarcity concept because he lives it. He goes to the A. & P. and he recognizes that he cannot have everything which is on the shelves. The "three wish" fairy tales reflect men's yearning to close the gap between unlimited wants and limited resources. Cut-outs from the National Geographic Magazine and other pictorial material can dramatize the different degree to which nations have satisfied their people's wants.

Division of labor can be dramatized with the children by using simple experiments in the classroom. The class may organize two teams. One team executes a production process, such as making gingerbread boys on an assembly line, while the other makes them without using the division of labor. The time keeper decides which of these teams has been able to produce a given amount in less time and with less waste of tools and materials. Children discover division of labor in the home, where each family member does a particular job; in the neighborhood; in the city; in the nation; and in the world. Children discover the division of labor between men and machines. All these kinds of specialization introduce to children the ideas of international trade and mass production. In many classes, the teacher associates the children's discoveries with those of Professor Adam Smith and Mr. Henry Ford. Such identification of the child's experience with the experience of the big society is necessary to the success of this program.

Children's literature is full of delightful stories that can underpin specialization and the resulting interdependence. Through stories and games the children learn that trading would be much more complex if we could not use money as a medium of exchange.

In the second grade, the children can develop models for perfect and imperfect competition, and they can simulate the operation of the market. To dramatize the principle of perfect competition, the children may become wheat farmers one morning. Each child can represent the farmers of the different wheat-growing countries. The teacher can play the role of the broker whose task is to sell the farmers' wheat at the best possible price. At the end of the harvest the farmers report to the broker how much they have produced. The weather was good throughout the world, and since the game limits each country's production to two truckloads, the farmers from Australia, Canada, U.S., U.S.S.R., and Argentina ask the broker to sell their two truckloads at the best possible price. The broker starts an auction among the rest of the class who are the buyers. Their ability to bid has been limited by the toy money the teacher has given them. The bidding starts at a low price and as the buyers bid for the ten truckloads, the price moves up toward an equilibrium price at which all the wheat that has been offered for sale can be sold. The children discover the most important characteristic of perfect competition--the lack of control of the market by producers and consumers. The class may extend to another period when the harvest was twice as good as before. The children will be surprised to learn that the equilibrium price will be so low that the farmers' earnings will be smaller than previously when the farmers brought the smaller quantity to the market. This activity introduces to the children the concept of elasticity of demand without its being identified as such.

To dramatize imperfect competition, some children in the class may play the role of inventors, manufacturers, and owners of grocery stores. The game will help children discover that all these producers in different degrees can control the market. The class discussion can bring out how these different degrees of control affect the producers' power to set prices.

Finally, we get to public policy, where children decide what goods and services will be purchased together. Many goods and services are not purchased by each family but purchased together. The Mayor, the Governor, and the President of the U.S. prepare a long shopping list. After they have presented their long shopping lists, a discussion starts. Some people think the lists are too long and others think they are too short. Finally, they agree upon the proper length of these shopping lists. Then taxes are collected. The people may decide to pay for a part of the list from tax monies, and to pay for the rest by borrowing money. If we don't want to pay taxes, we have to go into debt to buy goods and services together.

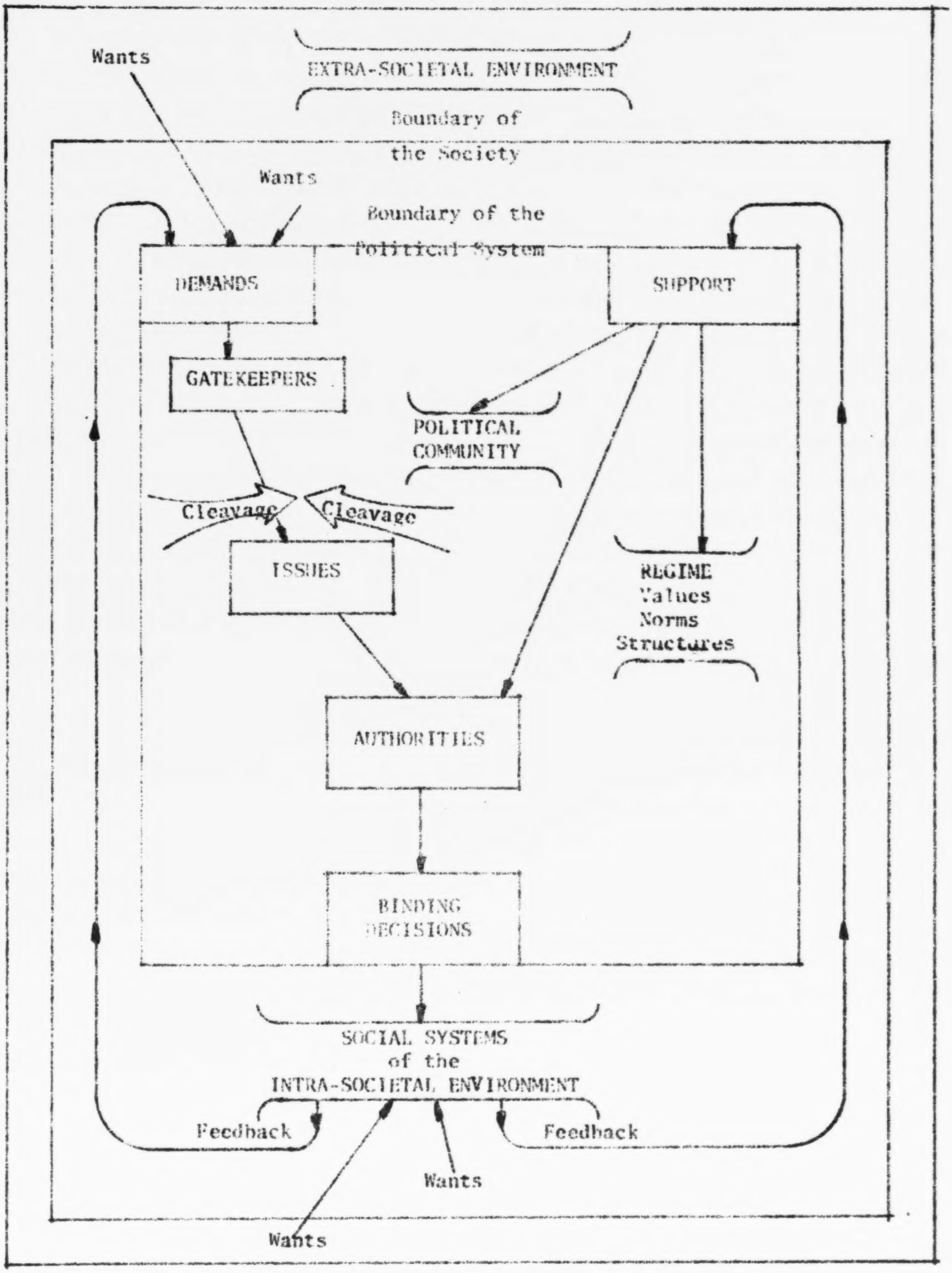
Fundamental Ideas in Political Science

The important idea relationships of political science were defined just as with economics. Figure 2 shows the system analysis of political life which Professor David Easton of the University of Chicago has developed. This chart contains the following ideas:

1. Members of society have many wants which they hope to satisfy.
2. Some of these wants will be satisfied through the economic system, family system, educational system, and religious system. Wants that cannot be satisfied by any of these systems are channeled to the political system.
3. As the people's wants enter the political system for satisfaction, they become demands. These demands are screened.
4. The screening process operates through formal or informal organizations. These organizations act as gate keepers. Some of the demands vanish. Others become issues debated in the political community (a group that shares a common set of political structures and processes).
5. The issues are molded by cleavages in the political community and by the authorities which translate these demands into binding decisions.
6. The binding decisions affect the social systems and the participants in the social systems, generating positive or negative support.
7. The support may be directed toward the political community (a group of people who share a desire to work together as a single unit in the political solution of problems), toward the regime (a political system which incorporates a particular set of values and norms, and a particular structure of authority), and/or toward the authorities (the particular persons who occupy positions of political power within the structure of authority).
8. The binding decisions generate new wants and these wants appear again at the gate of the political systems asking for recognition.
9. The source of the support for the political community, regime, and authorities may originate from the social systems in the form of education, patriotism and other mechanisms.

Figure 2

SYSTEMS ANALYSIS OF POLITICAL LIFE


Wants
EXTRA-SOCIETAL ENVIRONMENT
Boundary of the Society
Wants
Boundary of the Political System
DEMANDS
SUPPORT
GATEKEEPERS
POLITICAL COMMUNITY
Cleavage
Cleavage
ISSUES
REGIME
Values
Norms
Structures
AUTHORITIES
BINDING DECISIONS
SOCIAL SYSTEMS of the INTRA-SOCIETAL ENVIRONMENT
Feedback
Feedback
Wants
Wants

Teaching Applications of Political Science

In the same way that the fundamental ideas of economic knowledge can be related to the child's experiences, we can also relate the fundamental ideas of political science to the school children's experiences on every grade level. The home is a good example of how the innumerable wants of the family are satisfied through the various institutions, and of how many of the wants are exposed to the political scrutiny of the members of the family before they become the rules of the home. The discussion about the various forces which keep the family together has a striking resemblance to the different types of supports which keep the political society together. Looking upon the political system in this way is a fundamental departure from the present civics curriculum where the main emphasis is on description of the legislative, judicial and executive branches of the government.

Fundamental Ideas in Sociology

Professor Robert Perrucci of Purdue University has developed a fundamental structure of sociology which is already in use in experimental classrooms. The core idea is that of values and norms. The system is illustrated in Figure 3.

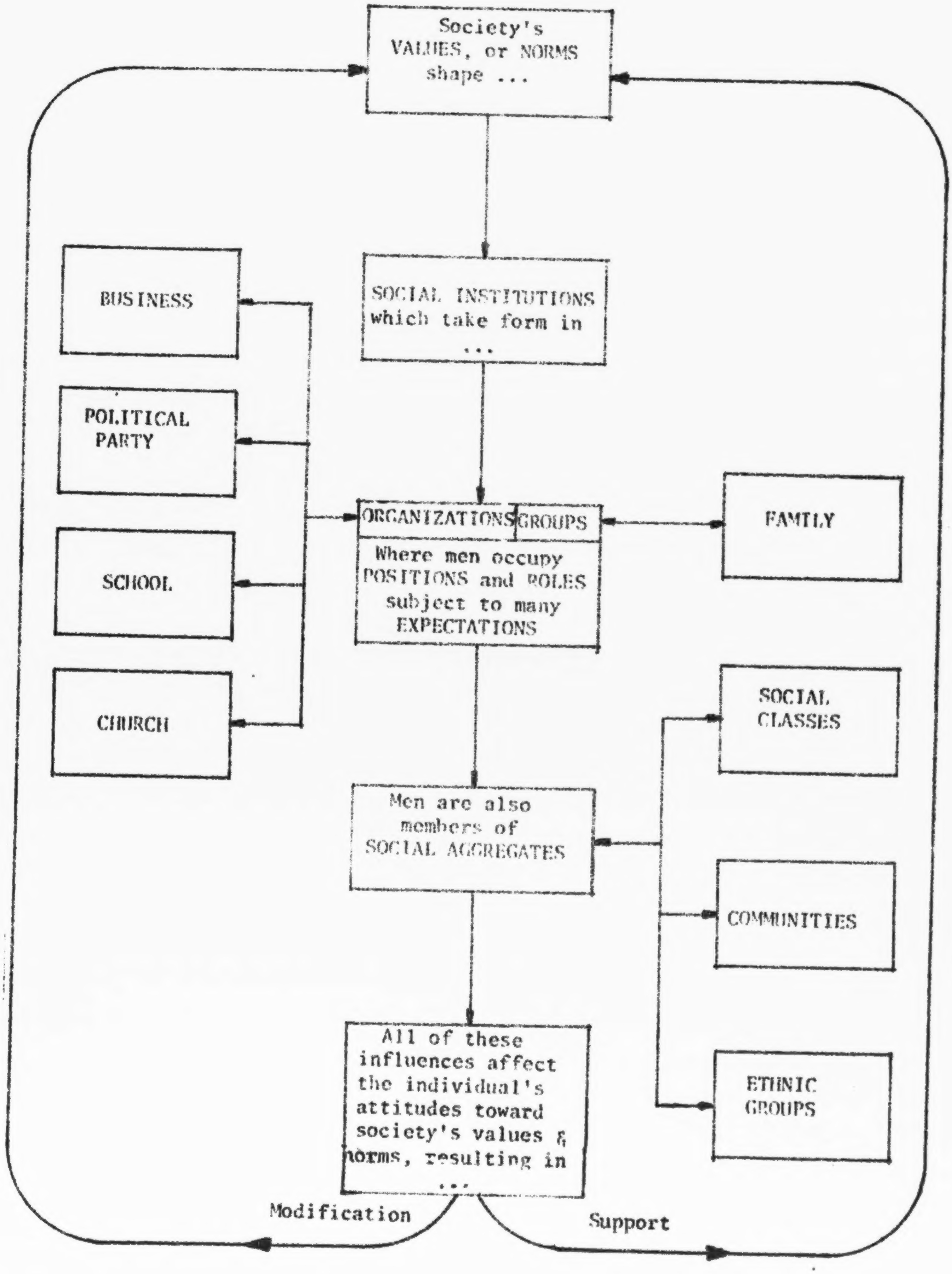
1. Values and norms are the main sources of energy to individuals and society.
2. Societies' values and norms shape social institutions, which are embodied in organizations and groups, where people occupy positions and roles.
3. People's positions and roles affect their attitudes toward society's values and norms, and result either in support of the existing values and norms, or in demands for modification of them, and the circle starts again.

Teaching Applications of Sociology

The conceptualization of sociology enables us to develop units in the primary grades which will make children aware of the importance of predictable behavior among people. Units may show how the ability to predict human behavior creates orderliness in the family, neighborhood, city and the world. The teacher can demonstrate through experiments how unexpected situations have both very funny

Figure 3

FUNDAMENTAL IDEAS OF SOCIOLOGY


Society's VALUES, or NORMS shape ...
SOCIAL INSTITUTIONS which take form in ...
BUSINESS
POLITICAL PARTY
SCHOOL
CHURCH
ORGANIZATIONS
GROUPS
Where men occupy POSITIONS and ROLES subject to many EXPECTATIONS
FAMILY
SOCIAL CLASSES
Men are also members of SOCIAL AGGREGATES
COMMUNITIES
ETHNIC GROUPS
All of these influences affect the individual's attitudes toward society's values & norms, resulting in ...
Modification
Support

and very sad consequences. Children's plays can bring out that the school, business and family could not exist without predictability and order in human behavior.

The many positions men take in society can be observed at home. The children may prepare charts showing the different positions fathers, mothers and children take and the difficulty of fulfilling all the expectations attached to the positions. The children can show that, depending on which positions we think more important or less important, and depending on our ability, we can fulfill some positions better than others. The story of The Ant and The Grasshopper points out effectively the value preferences of the two. The children can also observe and experiment in the classroom how men's positions, due to science and technology, and due to change in ideas, have changed during history.

Laying the foundation of sociological concepts in the primary grades helps children to understand later how interplay between values and institutions brings about social reforms.

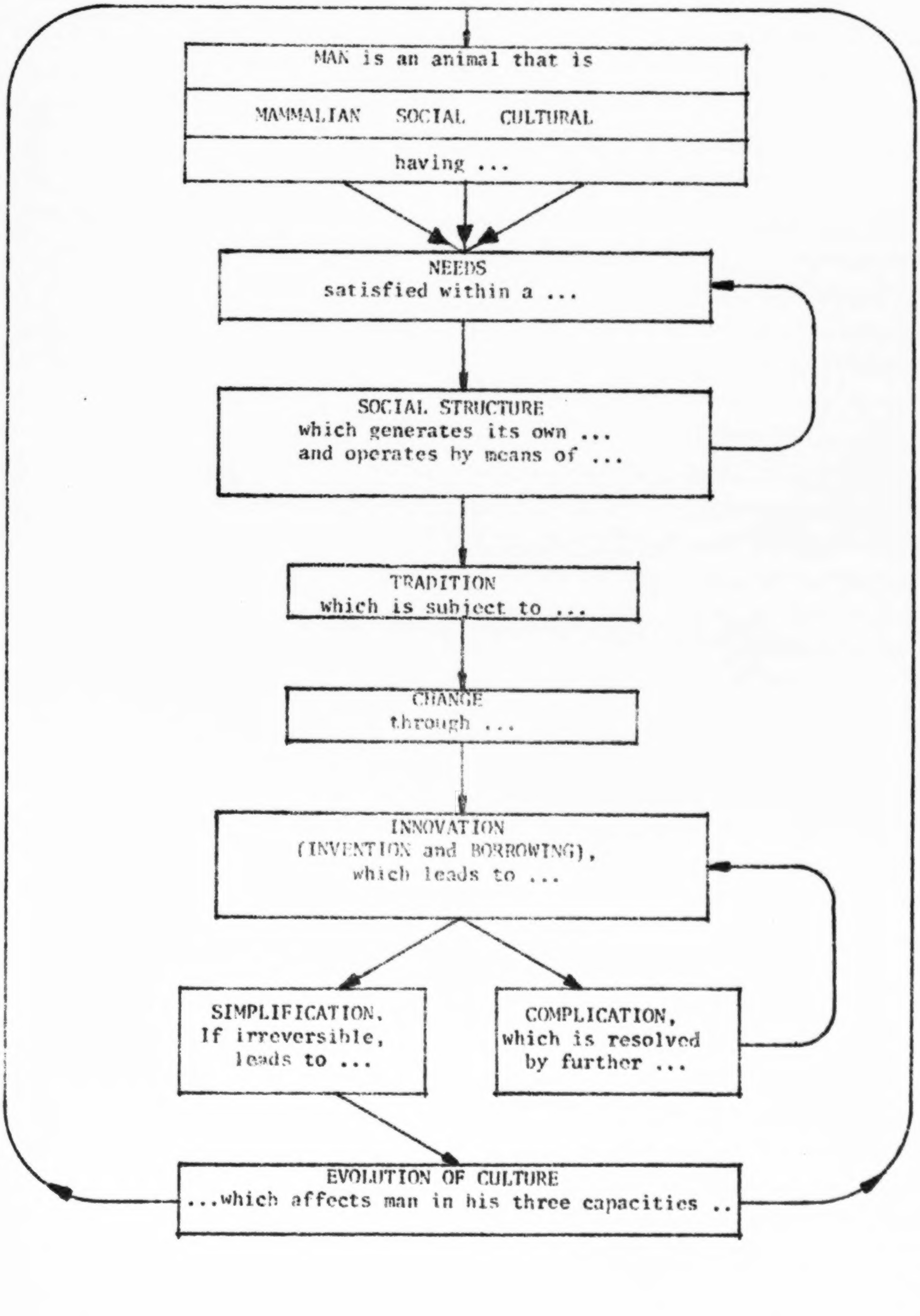
Fundamental Ideas In Anthropology

Fundamental ideas of anthropology have been developed by Professor Paul Bohannan of Northwestern University. Figure 4 shows the following idea relationships.

1. Man may be looked upon as a
   a. Mamalian animal
   b. Social animal
   c. Cultural animal
2. Man, in these three capacities, has needs.
3. Man's needs are satisfied within a social structure.
4. Social structure itself has needs (called "requisites") in order to persist.
5. Needs are satisfied within a particular set of patterned behavior: tradition.
6. All traditions leave some wants unsatisfied.
7. Dissatisfaction leads to changes in traditions.
8. The change takes the form of invention and borrowing: innovation.
9. Innovation leads to complication and simplification.

Figure 4

FUNDAMENTAL IDEAS OF ANTHROPOLOGY


MAN is an animal that is
MAMMALIAN SOCIAL CULTURAL
having ...
NEEDS
satisfied within a ...
SOCIAL STRUCTURE
which generates its own ...
and operates by means of ...
TRADITION
which is subject to ...
CHANGE
through ...
INNOVATION
(INVENTION and BORROWING),
which leads to ...
SIMPLIFICATION,
If irreversible,
leads to ...
COMPLICATION,
which is resolved
by further ...
EVOLUTION OF CULTURE
...which affects man in his three capacities ..

10. Complication leads to social dislocations. Problems caused by dislocations may be resolved through further innovations.
11. If simplification is of such a magnitude that it forms an irreversible base for man's behavior (for example, money and the use of fire), it leads to evolution of culture.
12. The evolution of culture affects man in his three capacities as a mamalian, social and cultural animal.

Teaching Applications of Anthropology

The conceptualization of anthropology in this way will enable the elementary school curriculum builder to develop meaningful units on such conventional subjects as the Eskimos and the American Indians.

A unit on the Eskimos, for example, demonstrates how acceptance of the idea of money changed the life of the Eskimo. The Eskimo in our unit acquired his food, clothing, and part of his shelter from caribou. The scarcity and his nomadic life affected his value system. Then the Eskimo found out that far away there is a trading post where Eskimos can trade silver fox pelts for articles which he had never had before. Our Eskimo family stopped hunting and started to trap silver fox to use as a medium of exchange. The family settled down near the trading post in an Eskimo village. There was less uncertainty here. This story presents to the children evolution in the Eskimo culture. Living together with other Eskimos created new problems. The family's needs changed. Their desire for learning increased. The changes came about because money as a medium of exchange had been accepted by the Eskimo family.

In the higher grades, the conceptualism of anthropology will help the curriculum builders to develop units which will show how the development of underdeveloped areas and the pursuit of nationalism affects people's tribal loyalties and changes their physical, social and cultural needs.

These are the four areas of social science in which we have tried to formulate the fundamental idea relationships. Deliberately, we are leaving the areas of history and geography to the last stages of our inquiry. The reason is that these two areas have a different character from the other social sciences. They have to borrow many of the analytical tools of the other areas of the social sciences to explain a geographic area or the processes of history. Until now history and geography in the elementary and secondary school curriculum have been mostly a narrative of men's actions and a description of their environment. Now, our team of social scientists hope to use their analytical tools to explain cause-effect relationships in man's actions in time and place. Using the analytical tools of social scientists, the children can begin to simulate the historians' and geographers' methods of inquiry.

Fundamental Ideas in Geography

The scope of the geographers' inquiry has been worked out by Professor Peter Greco of Syracuse University. The fundamental ideas in geography are shown in Figure 5, and described below.

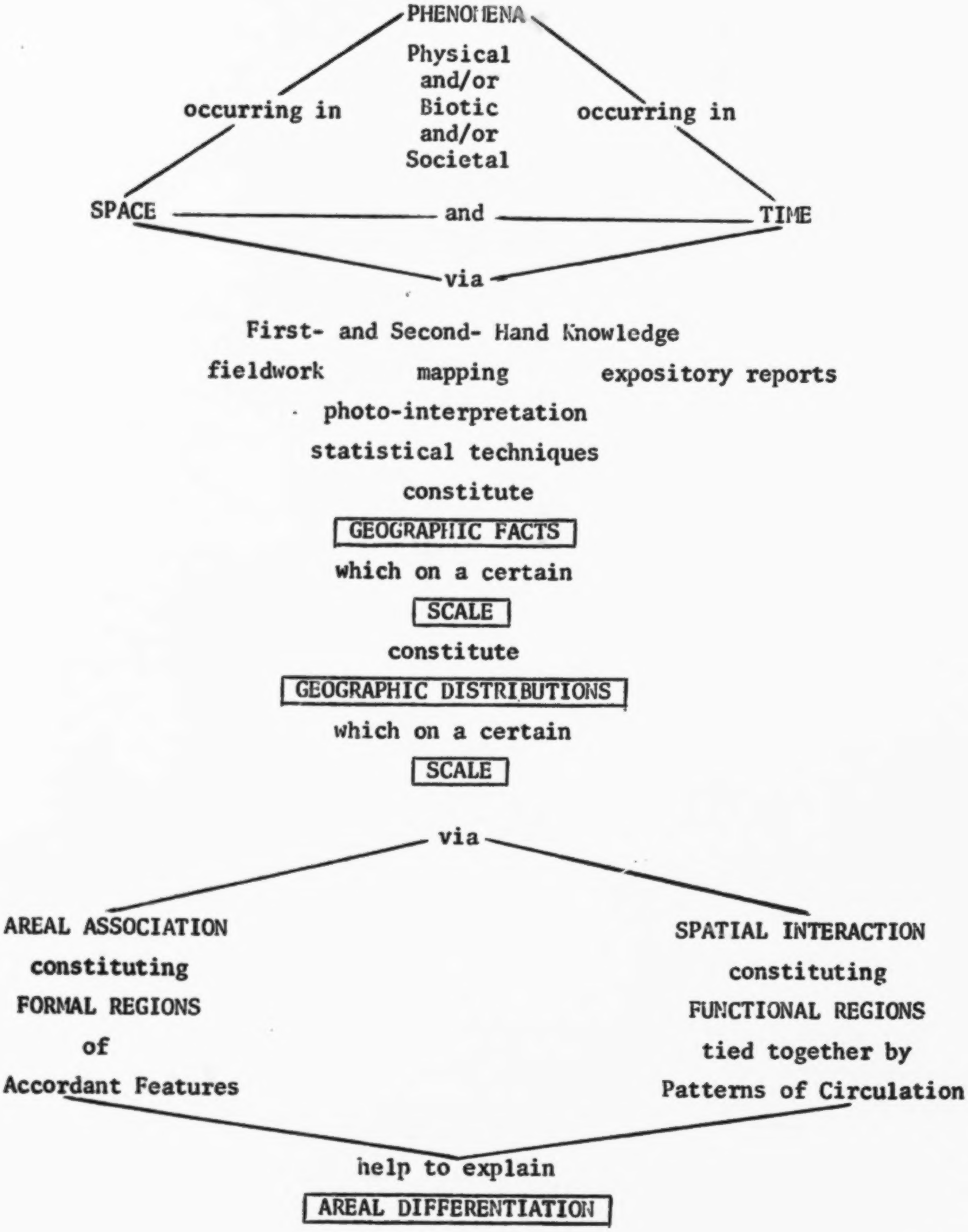
1. Every geographic area is affected by physical, biotic, and societal forces.
2. The impact of these forces on a geographic area creates similarities among areas. These similar areas are called uniform regions. They are static in character.
3. The similarities among different areas have been brought about through different combinations of physical, biotic, and societal forces.
4. An area may be kept together through a pattern of circulation binding the area to a central place. This area is called a nodal region, held together by functional relationships. The nodal region is dynamic in character.
5. Uniform and nodal regions are often related to each other through gravitation to the same central place.

Teaching Applications of Geography

The classroom applications of geography are now in preparation. Activities are being constructed to show the many ways in which the surface of the earth may be divided by geographers, depending upon the objectives of their inquiries. Units are also being constructed to show how the shape and size of the divisions of the earth's surface are influenced not only by natural forces but also by the state of science and technology. Deserts and cold lands, which in the past have been unproductive, may now become productive through scientific progress; for example, irrigation or the discovery of oil can make a desert productive, and

Figure 5

FUNDAMENTAL IDEAS OF GEOGRAPHY


PHENOMENA
Physical
and/or
Biotic
and/or
Societal
occurring in
occurring in
SPACE
and
TIME
via
First- and Second- Hand Knowledge
fieldwork
mapping
expository reports
photo-interpretation
statistical techniques
constitute
GEOGRAPHIC FACTS
which on a certain
SCALE
constitute
GEOGRAPHIC DISTRIBUTIONS
which on a certain
SCALE
via
AREAL ASSOCIATION
constituting
FORMAL REGIONS
of
Accordant Features
SPATIAL INTERACTION
constituting
FUNCTIONAL REGIONS
tied together by
Patterns of Circulation
help to explain
AREAL DIFFERENTIATION

the discovery of minerals in Alaska and the Antarctic can increase the usefulness of those frigid lands.

In defining and studying regions, geographers are concerned with physical, economic, sociological, anthropological, and political facts. The regions defined by physical, economic, sociological and anthropological factors seldom coincide with the boundaries of the political systems that men have set up to solve some of the most important social problems. The resulting dissimilarities between political and non-political regions have been the cause of many problems. For example, if a river basin or an ethnic group is bisected by a political boundary, serious political tensions may result. Such problems may be "solved" by war, by international agreements, or by other social mechanisms. The approach we are taking, as shown by this brief description, provides a partial synthesis of political science, economics, sociology and anthropology with geography.

Conclusion

The development of the organic curriculum and its orchestration is not a crash program. It is a lifetime commitment. It is the job of the academic departments of universities to stimulate more social scientists to pay attention to the problem of structuring the knowledge of their own discipline. Such logical patterns of ideas will serve the social scientist as a map to identify new areas of research, and will serve the curriculum worker as a guide to build a curriculum which can be adjusted to incorporate new ideas as the frontier of knowledge expands.

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[1] In G. W. Ford and Lawrence Pugno, The Structure of Knowledge and the Curriculum (Chicago: Rand McNally, 1964).

CHAPTER 4

ROUND TABLE: CONCEPTS, PROCESSES AND VALUES

The Obsolescence of Particular Content

Taba: I have a philosophical question about the whole business of identifying concepts. I am trying to relate what Dr. Feigl said earlier to what Professor Senesh has just said. First Dr. Feigl said that all concepts and structures are related to some discipline; in other words, they are constructs. In that sense they are somewhat colored by the prejudices of the particular discipline, or the particular enterprise. Then Dr. Senesh brought up a much more generic question; he said that we are preparing children for a world of the twenty-first century, one that we don't even see yet. This means that economics and everything may be different than they are now. If we visualize society in the twenty-first century, we might be able to visualize one without war, and, as Buckminster Fuller describes it, a society where we can make more and more with less and less. That's his idea of the dynamics of technology. If that is so, what about the concept of scarcity as a central concept of economics? If we take these three things into account, don't we need to question how and what concepts we select and how we use them in this enterprise for which we are preparing, i.e., education?

Senn: One answer or one way to begin it would be to ask: Scarcity for whom? The capital resources required to utilize technology are so expensive that by the twenty-first century, if our present rate of population growth continues, we know that Africa, Asia and South America won't have sufficient capital resources. One way to get at this is to ask, who is going to have scarcity?

Taba: You forget Mr. Fuller's assumption that if we produce more and more with less and less, we may have a society of total affluence.

McNee: Another approach to this is to accept the basic premise of economists that there will always be a scarcity of something. It may not be the things that have been scarce for ten thousand years; something is going to be scarce, though. This affluence produces waste products which must be taken care of. The real scarcity of the twenty-first century may be fresh air, and other things that we have always thought of as free goods. I don't think I would be so quick to write off the idea that there will always be scarcity.

Taba: No, I am not writing it off. I was asking the question: When we formulate concepts, what are all the things we may need to take into account, if we assume that we are preparing children for something that we don't yet have? Is there not a greater dialectic needed than saying in economics that scarcity is central? We need to open up alternatives and this is the essence of my question. Scarcity was just an example.

Senesh: I think I agree with you; I think we should open up a lot of alternative ways for children to look at things. But economists at present would not consider Buckminster Fuller's idea very seriously. It seems to me that we will never resolve scarcity. If we resolve scarcity there wouldn't be economists, since there would be no need for them. As a matter of fact, at that point we wouldn't need an economic system to allocate resources. The allocation problem would cease to exist. When Galbraith talks about the affluent society, he doesn't mean that we have technologically licked the problem of scarcity.[1] He is bemoaning the tremendous affluence in the private area and the complete poverty in the public area. Allocation is a greater problem than the technological solution of scarcity.

Stevens: I may be wrong, but this doesn't get to the question that she's asking. We are not asking specifically about scarcity. We are talking about the selection and formation of particular concepts that we include in the curriculum now, but may not be applicable in twenty-five, thirty, or fifty years.

Senesh: I think that is absolutely right; we must try to prepare for changes that cannot be predicted. Here is a little experience I have had, in handling the subject of cities in the third grade. I have visited the tremendous metropolitan areas of underdeveloped countries where I have seen real metropolitan development. My whole attitude on the theory of urban development has changed considerably since I talked to urban developers in India and in Japan. Now I will incorporate a new idea which is emerging. In this new type of urban theory we are dealing with the relationship of urbanization to industrialization. In the past we have assumed that industrialization is ahead of urbanization, but now a new phenomenon has been created. People are pushed out of the farm and moved to the city as a last resort; they are not pulled into the city. I am now incorporating this new idea into my third grade unit. All I can say is that I agree with Professor Taba. We should try to anticipate the future by taking the cutting edge of knowledge, but I do not think that scarcity was the best example.

Content and Grade Level

Saylor: In your assumptions about teaching these concepts and ideas in the first grade, there is no question but what they can be taught in the first grade, but should they? You did not in any case justify including them in the first grade. Should first grade be devoted to linguistics or to the arts or to music? Perhaps these economics and social science concepts should be delayed until junior high, let us say.

Senesh: All I can say in my defense is that we teach social studies in grade one. I am not asking for a new subject, but to eliminate the Mickey Mouse and put in something good. I am not demanding more time. All I ask for is that the same time should be allocated but with experience underpinned with analysis.

Learning Analytical Processes

Hering: Professor Senesh mentioned that the crucial thing is to develop the analytical process, or respect for problem-solving. If we do this we have solved the problem you present. If new concepts are necessary, the needs will be recognized as they appear. If we have developed analytical faculties, we do, in fact, answer part of our problem.

Shaver: This is very interesting. If you take Schwab's definition of a discipline and are willing to think in terms of substantive and what he calls syntactical or methodological concepts,[2] and look at the current projects in social sciences, you find that most of them concentrate on the substantive content. If you look at the chalk board on anthropology, you see that it is describing what the world is like or what we think it is like. The emphasis is not on the process through which the scientist arrives at the ideas and tests them. The emphasis is not really on the analytic but on the substantive. I think that a philosophical question, or a logical question, is raised about the relationship between statements of objectives and what actually emerges. It almost brings one back to the old period in history when we assumed that children learn how to be as critical as historians by reading histories. I doubt that anyone learns to think like Schlesinger by reading The Age of Roosevelt. There seems to be an assumption that if we teach children the substantive concepts of a discipline they will learn to be analytical, and I would question whether this assumption is valid.

Hering: It depends on how they learn the substantive, though.

Senesh: I would like to react to the question, What is analysis? Figuratively speaking, there is beneath the chart published in my resource unit[3] another that I have not published because I was afraid of frightening the teachers away. In this one I underpin the different significant theories which can explain the market phenomena. When it comes to government, I introduce welfare theory. I incorporate these theories in important model-building exercises in the resource unit. However, these charts are just one dimensional, while underneath these are other layers, in much the same way as Professor Feigl started with different layers. The chart I presented to you may be at the descriptive level, but I have done that only for the purpose of communicating with first grade teachers. When we come to the resource unit, I beg you to notice how deliberately I build on that descriptive chart, underpinning it with some analysis and model-building.

Content and Process

Sigel: I think that the question is different; there are two problems before us. First, how we organize social science knowledge is arbitrary. Let's start with the assumption that we have an amorphous body of information. We are going to organize these pieces of information in ways that are meaningful to us for some reason. Since we have been trained traditionally to think in disciplines, we think in disciplines. We think in economic terms; we think in sociological terms; and so on. The organization of knowledge is important; but equally important is the fact that the method of organization is arbitrary, and therefore that it can change and, conceivably, improve. By improvement, I mean change of a kind that will make it more relevant for solving problems.

Second, if we say that the state of knowledge is tentative, not only in sociology or social science but in all our stated knowledge, then the comment that was made about teaching children the way to approach a problem, as an active process of cognition, is extremely important. What we must do is find out how we attack a problem irrespective of its content. The question is how do we present to the child, facts a, b, c, d, which are contradictory, or which are similar, and how do we teach children how to handle contradictions? How do we help them in the way of coordinating multiple bits of information into some kind of a unit? This is what I think of as process. What we have to do is simultaneously grapple with content and procedure.

We have the same trouble the children have, because we cannot coordinate any better than they can. We were not trained to coordinate subjects. We were trained to take a course in economics 101 and a course in sociology 101. Those professors never talked to each other and we never could talk to each other on that examination that we flunked. So we really have to reorganize our own ideas, and that is the core of our dilemma. Whether we'll resolve it in all of our lifetime is another question. I think we have to face up to what our problem really is. I get impatient with the preoccupation with substance, although I don't deny its value.

Shaver: I would like to expand on Professor Sigel's statement - that it is not only necessary to help children learn how to handle conflicting evidence, but that there are also operational and procedural concepts that you can teach them. If you are teaching something in history you should not take two documents which are internally inconsistent and help them find the internal inconsistencies. If you do this with one or two documents, the next time they may not think to look for internal inconsistency. You first help to develop the concept of internal inconsistency, which the historian then brings to bear on all of his documents when he looks at them. You label the concepts specifically, and teach them, because the evidence is that they aren't going to learn them implicitly. If you can label the operational, procedural, or syntactical concepts and put them along with the substantive, accepted concepts, you have some guarantee that the children may learn them and then be able to apply them later.

Attitudes and Values

Fenton: I would like to expand this analysis one step further by indicating dissatisfaction with concentration on content and analysis without attitudes and values. It seems to me that Professor Senesh is getting at attitudes and values. I wrote down a quotation, "gain respect for analysis." That's an attitude. I am also concerned about the concentration on description, content, and analysis of our society, and our society alone, and its effect on the attitudes and values of children. Aren't they going to look at primitive societies and say there is something wrong with these people, because there is no division of labor and because they don't take some of the obvious insights we have and change their society in a way that will make it work better? Aren't we really being enormously ethnocentric if we concentrate almost exclusively on our own society in the early years, so that we teach the students implicitly that a command society in economics, or a traditional society, is in some way wrong? I think that unless we get our attitudes and values defined behaviorally very early in the game, we may implicitly, if not explicitly, disregard them.

Berlak: I would like to pick up this very same point, dealing with ethical issues. When you say that you are going to teach children to solve problems, we may ask what kind of problems. A certain set of problems that we want to look at are basic ethical issues that confront us in our society. In the basic issues of equality and freedom you may look at syntax in order to deal with ethical conflicts as well as the empirical conflicts. As I look at the curriculum work that concentrates on the social sciences, I not only observe the absence of emphasis on syntax with respect to matters, but also with respect to ethical issues. I think that there is such a thing as well structured ethical discourse which we must think about very carefully. I do not think that you should just get children to reflect and give their opinions, but that you should look for methods of careful analysis of what the ethical issues are. I think that ethical problems are related both to substance and to procedure, or syntax. Ethical dilemmas may not be the sole concern of social science curriculum, but it appears to me that they are important.

Hering: Please forgive a personal example, since I have not been out of the classroom very long. In the context of what has been said here about ethics, and what Dr. Fenton said about ethnocentrism, there are people who state that the primary purpose of social studies is to open closed areas. The question that I would raise is: Why are the areas closed? Ethically, why are they closed? I am reminded of a problem with a slow learner class I once had, which made a comparison of the ethics of the Buddhist precepts and the Hebrew ideas of the Ten Commandments. These children, who were extremely poor readers and had a very difficult time grasping a lot of things, began to see, for example, that the Ten Commandments are expressed in a negative tone. The Buddhist precepts are expressed in a much more positive tone, and they began to question why this was the case. Why was one negative and the other positive? It seemed to me that two things were accomplished. One is that they learned a little bit about the fact that various people meet their needs in different ways. One of the needs that they face is that of behaving in order to get along with each other. More important than that, they learn through this process that you can inquire and discover how man satisfies some needs which aren't necessarily economic, although they could become that. By learning this they have learned process at a very elementary level.

I think it is important to get across the idea that what you learn is not as important as how you learn it. When new things confront you in the future, you've got to know how to go out and learn them yourself. I've seen this happen with extremely weak students and I don't see why we can't begin to orient ourselves more and more toward this.

Symmes: I'm going to assume that we have both behavioral and substantive outcomes. You can't have the analysis in a vacuum. I wonder, Professor Senesh, whether the content of what you teach about the structures of particular disciplines will apply as well to other cultures, which have non-market economic systems. It seems to me that your curriculum is not necessarily culture-bound, that it could be applicable to other cultures.

I am wondering, in terms of learning theory, at what point the child understands this structure of the total system. Does he learn bits and fragments until he reaches a ninth grade or a senior course, when he learns the total structure? Certainly the teacher has to know this. Or, are you assuming that at the first grade level, in each of these areas, the structure of discipline would be taught?

Senesh: Not at all. I am projecting the structure of knowledge upon the mental screen of the teacher. When the child comes and tells his teacher that his father broke his piggy bank and took out his savings because he lost his job, the teacher will be able to analyze the reason his father lost his job. The teacher will recognize what's on the right hand side of my chart as it relates to the total level of income and employment. This is a guide for the teacher. Teacher training is an issue that will come up, I am sure. I assume that in the future the whole concept of introductory courses for future elementary teachers will be changed, so that we do not throw them an 800 page introductory textbook by Samuelson or Bach and assume that elementary school teachers are able to see the fundamental idea relations. I hope that a brand new approach will be taken to the substantive training of elementary school teachers. I intend to write a social science textbook, a real textbook. I have to analyze what that textbook really is. I will ask the question, What holds society together? We mediate and compromise with our bosses. I will explain the allocating and mediating mechanism of the economic system, the political system, the societal system. I hope that the twelfth grade course will be a capstone course. Eleven years of experience will be culminated by formally presenting this conceptualization to them. I would like to defend myself by referring to my chart. The ideas of scarcity, of specialization, of market, of public policy, change in relative size when it comes to a planned economy. The relationship between the private and the public sector changes.

Fenton: I understand your point about analysis and structure, but I am not sure the same approach is sound with respect to values. If students get the notion that the way to organize society is through a market, and get this notion hammered in, year after year, then they might, in the long run, think that other systems are quite wrong in some ways - and that will hinder your efforts at teaching analysis.

Senesh: In fourth grade geography and history and in all the other grades, I open up all types of allocating mechanisms. This is the place where you show how society has organized one area that is entirely different from others. In history, for instance, we look at the American economic and political system, starting with mercantilism and moving to our mixed system. This puts economic systems in a dynamic context that can be read vertically through history as well as horizontally in geography.

I have a good answer to Dr. Fenton's question. In the interaction between government and market, the children discover exactly the opposite of what he holds. They are disappointed in the market economy when they realize that, through public policy, we abridge decisions of the market economy right and left. The children come out with a pragmatic view of the American economic system. They learn that in the market economy there are always at least three-quarters of our 200 million people who don't like its decisions for some reason or another. It may be that they don't like them because they are apostles for general welfare or because they are apostles to maximize their profits. Many businessmen are half socialist: they individualize profits and socialize losses. The market is not a holy institution; we modify it all the time. We have done so throughout American history, beginning with Hamilton.

Summary Comments

Taba: I should like to make several brief remarks. First, I started with two assumptions, and in the first I may have been wrong. I started with the assumption that this meeting and that the activities of the Consortium were for the purpose of re-questioning, re-shaping, and supplementing ideas, not defending positions. Somehow we got into a position of defending something.

The second assumption concerns learning: namely, that children's minds are shaped by the nature of the structure and concepts which they handle. Therefore, the way you put them together and the way you handle them are very important - not just whether they are substantively correct but what the concepts do to the minds of people as they go through the process.

I think this influence of the structure and concepts by which one has been trained is illustrated here in our own discussion. We have been faced with the triple dilemma (Professor Feigl will have to tell us whether there is such a thing, and whether dialectics can be applied to it!) of dealing with substantive content, process and values. We have evaded the issue, even though it has been restated three times, because each of us is in his own cave and can't get out of it. We have dealt with illustrations, but not with the real problem of how these three important things should be related in education.

The future task of a Consortium of this kind is to create the kinds of minds that can break out of whatever the limitations of those caves are. Let me add one more thing, namely, aren't alternatives and openness the most important thing, the chief qualities whatever we deal with substantively? I wish that Dr. Feigl would comment on these matters.

Feigl: I think that Professor Taba has summarized the discussion very well.

I tried to propagate the philosophy of the open mind, of the critical approach, which is a golden mean between the dogmatic, on the something-more side, and extreme skeptics on the other side. Clearly a critical attitude is the sort of thing that is most conducive to fruitful results. The dogmatist, if he ever had his mind open, has swallowed something that he took for the truth and his mind is never open again. The extreme skeptic has his mind open on both ends, as it were, and everything flows through. So, clearly, a golden mean attitude is advisable, in regard to questions of fact or of knowledge as well as of personal evaluation. From my own philosophical point of view, I wish to make a logical distinction between questions of fact and questions of value. Both are of tremendous relevance to all educational problems. We all wish to stay clear of the stigma of indoctrination, both on the side of information and of evaluation. We try to educate our children to keep an open mind. But education must not be so fluid as to be unclear and lacking in substance. What can we do?

In the future, we may not only have vast political and economic changes, in addition to technological ones which are related to them, but also we will begin to tamper with human nature in biological engineering and eugenic planning. Here arise grave, ethical questions, to which no one has a very definite answer, unless he be a dogmatist and tied to a particular system or creed. What will happen in the future when biological and psychological engineering takes place, when, heaven forbid, teaching will become brainwashing? I don't know.

In any case, what the philosopher can contribute is something very modest, namely, to look with an open mind at all these various alternatives and appraise the pros and cons as best as he can from our present framework of values. Here we are not even united because people have different fundamental commitments. I think one task of education is to help us all become clear about the commitments.

I am tremendously impressed with what Professor Senesh has pointed out, particularly because he thinks along the lines, shall we say, of a program of the unity of science. These old scholastic divisions of economics, sociology, anthropology, history and political science are closely interrelated, if you look at mankind in action. They are, at best, helpful divisions of labor, and to create departmental divisions so that people know what department they belong to in the school or in the university. As soon as we can teach the children how these things are interconnected, schematic structures of this sort will be immensely helpful. To diagram political science as a systematic analysis of political life may now be too high a level of aspiration, but this could be enlarged to include the sociological, the psychological, the economic, and so on. The gestalt psychologists have shown that a very effective method of teaching and learning is to map out the territory first and then fill in the details.

I hope I did not misunderstand Professor Senesh. I consider his policy of education a successive, progressive enrichment of content built into experience. This much is psychologically clear. Nevertheless, the teacher should have this conceptual structure before him, and I think it will be very fruitful. Map out the country and then dip down, here and there. Illuminate this with substantive details. This seems to me a good pedagogic policy.

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[1] John Kenneth Galbraith, The Affluent Society (Boston: Houghton Mifflin, 1958).

[2] The reference is to Joseph J. Schwab. See his "Structure of the Disciplines: Meanings and Significances," and "The Structure of the Natural Sciences," in G. W. Ford and Lawrence Pugno, The Structure of Knowledge and the Curriculum (Chicago, Rand McNally, 1964).

[3] Lawrence Senesh, Our Working World: Neighbors at Work; Resource Unit (Chicago, Science Research Associates, 1964).

CHAPTER 5

A STRUCTURE OF HISTORY

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The title of my talk, "A Structure of History," is phrased to take account of the wide diversity of opinion which exists on the subject. One can hardly speak of the structure of history; indeed, many historians deny that their discipline has a structure. They point to the unique quality of each historical event and decry attempts to construct theories, develop models, or even make high-level generalizations. Even those historians who believe that history has a structure will quarrel about its nature. Some of the discussion stems from disagreement about what history is. This issue--the definition of history--provides a good starting place for our discussion.

Definition of History

I have accepted the definition given by R. G. Collingwood in The Idea of History.[1] Many other historians support Collingwood's position. He makes four points:

1. "History is a kind of research or inquiry." It consists of a form of thought organized around asking, and trying to answer, questions. The questions concern something the investigator does not know for certain--the cause of a war may serve as an example--and the answers must be discovered. Any article in the American Historical Review supports implicitly this definition of history.
2. The object of history as a discipline is to find out about the actions of people who have lived in the past. The teacher may use history for additional objectives--for example, to shape the attitudes of his students--but the professional historian writing a monograph or a journal article usually stresses scholarly investigation about the past as his sole objective.
3. The historian proceeds by interpreting evidence. Evidence consists of any remains from the past--documents, buildings, paintings, recordings and so forth. The historian reads and looks and listens,

noting the evidence that strikes him as germane to his inquiry and ordering it according to established rules. These two activities--noting what seems germane and ordering evidence in an argument--contain the key to the utility of structure in the historical discipline.

4. Finally, history is useful to study because it can encourage reflective thinking leading to human self-knowledge. A man should know himself. He should know what distinguishes himself from other men and he should know the nature of man as a species. A clue to what man is and to what each individual can become lies in what man has done. Hence history is a worthy study.

Notice that Collingwood rejects by omission some dictionary definitions of history which treat history as all the things which have happened in the past or as a record of past events. We know only a tiny fraction, some small proportion of one percent, of the historical events which have transpired. Moreover, no one scholar in a lifetime of effort could investigate all the extant data about even one major historical development like the American Revolution. He could only select data to note down from the sources he was able to consult. He cannot have an impartial record; he can only produce an interpretation determined by the criteria he established for the selection of evidence from his sources and by the rules he used to draw conclusions from this evidence. History is a kind of inquiry. A student who learns facts and generalizations about the past without becoming involved in the process of inquiry--and most students in American schools do exactly this--does not study history.

The Idea of Structure

Now let me turn to structure. Joseph J. Schwab defines the structure of a discipline in part as "...the body of imposed conceptions which define the investigated subject matter of that discipline and control its inquiries."[2] If we accept Schwab's definition and wish to determine the structure of history, we must identify the imposed conceptions which control historical inquiry. In the past decade, social studies specialists have identified three sets of imposed conceptions: generalizations, basic concepts, and analytical questions. Two of these schemes--generalizations and concepts--I do not find particularly fruitful. The third--analytical questions--lies at the heart of the historian's process of inquiry, where their utility is obvious. Let me discuss these statements in more detail.

A number of workers, the most notable of whom are Paul Hanna and his students, seem to have identified the structure of the social studies, including history, as a list of generalizations: "people migrate when they are hungry" or "division of labor results in increased productivity."[3] Hanna's list contains more than 3,000 generalizations drawn from representative volumes recommended by social scientists. Hanna has arranged these generalizations into nine categories which represent in his scheme the basic activities of mankind and constitute a rudimentary method of inquiry. I find the entire system shallow and of dubious utility. There are too many generalizations to learn--one-and-a-half every school day for twelve years. Moreover, some of the basic activities aren't basic. But the scheme's principle fault lies in its conception of the social sciences: they become primarily a body of known generalizations rather than a process of inquiry. They consist primarily of things to learn rather than ways of learning. Yet lists of generalizations are one legitimate way to think about structure because they do define the investigated subject matter and they do control its inquiries. They just don't do either task very well.

Lists of basic concepts--the concept of power or the concept of culture will serve as examples--are more useful than generalizations, but they still leave something to be desired. They have two major advantages. In the first place, scholars who have been identifying concepts choose a limited number--say thirty-five--which a student might conceivably master in the twelve years of study. Secondly, some of the lists, such as the one from Syracuse, contain concepts having to do with the process of inquiry. Moreover, a list of concepts chosen to include the major analytical categories from the social sciences implies an analytical scheme which can control inquiry. "If you want to know about the past," they say, "investigate culture, power, the allocation of resources, areal association and so forth." Such a scheme guides the search for data. It helps to raise questions. It tells historians what to take notes about. It also provides an organizational scheme suggesting ways to present evidence.

But most historians are not comfortable with concepts. Despite the publication of Edward N. Saveth's American History and the Social Sciences,[4] an analysis of the uses of social science concepts in the interpretation of history, most historians still do not think naturally in terms of a conceptual apparatus. Lists of concepts evidently have not proved to be maximally useful to historians or they would be acknowledged more fully in the literature. Like generalizations, concepts make up a structure of history. Like generalizations, they are not the most useful structure.

Analytical Questions - The Heart of History

Historians control their inquiry primarily through the use of analytical questions: "Was there an event-making individual on the scene?" Notice that I did not say a list of questions. Each historian has his own list which has grown out of his life experience. The differences in lists help to account for different interpretations of the same events by two men conducting parallel investigations. Differentiated application of the rules of evidence account for the remainder of the differences.

Each historian approaches an investigation with questions to put to his data. His questions may have been derived from a variety of sources. An abstract social science model, such as supply and demand analysis, may have taught him to ask about the influence of a change in tastes on the demand for Ford automobiles during the 1920's when General Motors--unlike Ford--abandoned basic black. He may have learned from a course in sociology or political science to ask whether or not Joe McCarthy had ignored the folkways of the Senate, a proud and ancient club. Knowing that a large number of leaders of the assemblies during the early years of the French Revolution were petty bureaucrats may have prompted him to ask if leaders in the Russian Revolution were recruited from similar groups. An argument with a rebellious son at the dinner table may have caused him to reflect about child rearing patterns in other societies and hence to ask some new questions of Franklin's Autobiography. Analytical questions come from everywhere, not just from lists of concepts.

The analytical questions which a historian asks exert substantial control over his inquiry. Marx asked questions about class difference which guided his pen as he took notes in the British Museum. Analytical questions do guide the search for data. They tell historians what notes to take. They help to provide an organizational scheme for the presentation of evidence. They even determine the subjects of books and articles, each of which starts with a question growing out of a scholar's frame of reference. They are a legitimate way to think of structure as Schwab defines the term. They are the heart of the process of inquiry. They are essential to the study of history as Collingwood uses the word.

Implications for Social Studies

What does this definition of structure imply for the selection of content in social studies? It does not imply that our sole objective should be inquiry or that we should concentrate our attention exclusively on the process by which students can be taught to ask analytical questions and to develop questions of their own. Many curriculum projects have taken the question of objectives too lightly. We must begin to think more seriously about the different audiences in our schools--low IQ, disadvantaged, potential dropouts vs high IQ, highly motivated, college-bound students--and the objectives most appropriate for each group.

But given different audiences with which to deal; given three clusters of objectives (namely, attitudes and values, skill in the use of a mode of inquiry, and knowledge of content); and given the known relationship between objectives, teaching strategies, materials, and patterns of deployment: what does structure, viewed as analytical questions, imply for the problem of scope and sequence? Let me suggest four implications.

First, since many analytical questions useful in historical investigation come from social science disciplines, the social sciences should be taught early in the school sequence. If this conclusion is sound, the attempt to develop social science courses as senior electives may be misguided. So may the attempts to save a chronological approach to the fifth and eighth grade history courses. Why teach history at all in the grades? Why not wait until children can handle chronology better and until they have learned analytical constructs?

Second, historians must try to develop minimal lists of useful analytical questions. Those lists should be drawn from the work of other social scientists. I could easily turn many of Hanna's generalizations or Price's concepts into Fenton's questions. Carl Gustavson has taken a crack at a list in his chapter on causation in A Preface To History.[5] A methods book which I have written also contains some key writings on this subject.[6]

As we develop these lists, we ought to organize them in such a way that students will recognize immediately their source in social science concepts. We might begin by asking "What analytical questions are most germane to the analysis of a concept like culture?" A historian who uses these questions may be examining the culture of France during the reign of Louis XIV. Analysis of a culture demands a whole set of questions. Other clusters of questions can easily be developed.

Third, we must experiment with the types of materials and teaching strategies which will best help students: (a) to learn some analytical questions; (b) to learn them, perhaps simultaneously, in the process of inquiry; and (c) to learn to generate analytical questions of their own. The Social Studies Curriculum Development Center at Carnegie Tech has been experimenting along these lines for almost three years. We have some crude notions of what ought to be done based on our own evaluations. Several other groups and a number of individual scholars are also working at the problem. It is not easy primarily because so many variables are involved at once--audience, objectives, teaching strategies, materials, previous courses in the sequence. Three of our conclusions may prove interesting to you.

A comparative method seems to work well. In the two one-semester ninth grade courses, for example, we compare the political and economic systems of a traditional society, the United States and the Soviet Union. We build the same sets of analytical questions into our study of all three societies. This device obviously facilitates comparison because it requires students to seek data about the same issues. It also gives them an opportunity to use the analytical tools learned in their examination of a primitive culture for the analysis of two complex cultures. The questions they have learned are immediately useful. They are tried out in a different context. Our students remember them and are able to use them in a history course during the sophomore year. Repeated practice seems to help, hardly a startling conclusion.

A variety of types of materials can be used to generate questions. We have used anthropologists' case studies, diaries, letters, articles from periodicals and many other types of data. In each instance we write an introduction and study questions which lead students to generalize and to become self-conscious about the process of inquiry. We find all of these materials far more useful for our purposes than traditional text accounts which give away all the answers, often to all the wrong questions.

Finally, we have employed a wide range of teaching strategies to get at the use of analytical questions. In some cases, we have given students questions to learn and then invited them to apply the questions to data. Here we operated near the expository end of the continuum. On the other hand, we have sometimes given students raw data and challenged them to develop analytical constructs which the data suggest. They end a discovery exercise of this sort with knowledge of the data as well as knowledge of questions and of the process of inquiry. Many strategies dotting the continuum between these extremes are also useful.

In closing, let me suggest a fourth implication of structure viewed as analytical questions. We need new evaluating instruments. Our Center has heard about or developed two. The first consists of taped classroom sessions of experimental and control groups taught for a few days by a guest teacher who tries to get at the attack strategy of students. Do they use analytical questions or don't they? How do they handle the process of inquiry? Having classes taped enables a number of listeners to analyze the responses and to form judgments.

Our other proposed evaluating device consists of paper-and-pencil tests which will present students with data and ask them to pose questions to it. What questions will they ask--ones they have learned or ones they generate spontaneously? Will the questions be germane to issues that historians see implicit in the data, or will they be fired shotgun fashion in the hopes of hitting something? Can students ask clusters of questions getting at different aspects of the same issue? Only when we have defined our objectives behaviorally and developed instruments to measure their attainment can we hope to learn whether analytical questions are the most useful notion of the structure of history.

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[1] R. G. Collingwood, The Idea of History (Oxford University Press, 1946).

[2] Joseph J. Schwab, "The Concept of the Structure of a Discipline," The Educational Record, July, 1962, 197-205.

[3] For a summary of this scheme, see Paul R. Hanna and John R. Lee, "Generalizations from the Social Sciences," in John U. Michaelis, ed., Social

Studies in Elementary Schools (Washington, National Committee for the Social Studies, 1962), 62-89.

[4] Edward N. Saveth, American History and the Social Sciences (Free Press, 1964).

[5] Carl Gustavson, A Preface to History (McGraw-Hill, 1955), 55-64.

[6] Edwin Fenton, Teaching The New Social Studies in Secondary Schools: An Inductive Approach (Holt, Rinehart and Winston, 1966).

CHAPTER 6

AN APPROACH TO UNDERSTANDING THE CURRENT STRUCTURE OF GEOGRAPHY

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The Geographer's Way - A Definition

My first assumption is that the principal objective of a geography course should be to communicate "the geographer's way." In short, I am a Brunerite. Saying this does not really help very much, because you then have to decide how to define what the geographer's way is.

I define geography as what geographers share--not what geographers do, but what they share. Despite individual differences, there are a number of things that they share, which can be called the geographer's subculture. With apologies to the anthropologists, I will call this subculture a tribe. Like a tribe, this profession has its rites of initiation, its heroes, its tradition, its sacred books, its common technology and language, and its division of labor.

What is the first thing that one should look for in the mores or behavior of this tribe? I think it is the key questions that geographers have been concerned with for many years. One of the reasons for stress on key questions is my assumption that one of the chief things that gets professional geographers into geography, or professionals into any discipline, is their concern with getting answers to interesting questions. It is the research problems posed by geographers that give to geography its direction and thrust.

Geographers, wishing to give the appearance of a coherent and united group to outsiders, commonly define their subject in ways that are very inclusive and inoffensive. The result is broad, static and uninteresting definitions, which obscure both the diversity among geographers and the fact the major interests of geographers change from time to time. Occasionally, however, some intrepid souls venture to pinpoint the current foci of research interests, which reveal the current trends in geographers' thinking. I am going to discuss two such recent efforts.

Five Major Research Traditions in Geography

Professor William Pattison, the first director of the High School Geography Project, drawing upon his experience in the project and with many geographers, described four major research traditions in geography. The National Research Council, in a 1965 book titled The Science of Geography,[1] also addressed itself to the problem of identifying the key questions that geographers have been trying to answer. They, too, came out with a list of four major areas of inquiry, three of which were similar to Pattison's, and one quite different.

The important conclusions to be drawn from these two efforts are that the discipline of geography is quite pluralistic, and that it encompasses a cluster of research questions. I have combined the results of the two studies, giving a list of five research areas or traditions that will form the basis for the analysis of content and trends in geography that I shall discuss here.

1. Physical geography, or earth science; the arrangement and functioning of things on the surface of the earth.
2. Cultural, or ecological, geography; the relationship between man and his environment.
3. Regional geography, or area studies; what a given place is like as a totality.
4. Spatial geography, or location theory; the geometry of the earth's surface; why things are arranged as they are and why there are differences in densities, dispersions, and patterns.
5. Political geography; how the political system impresses itself on the landscape.

Recent Directions in Research

All five research traditions have existed from the time geography was first studied in Ancient Greece. However, progress in each tradition has been uneven. At the turn of the century, physical geography attracted the most attention. Somewhat later, the question of man in relation to his environment preoccupied most geographers. In the 1930's and early 1940's, regional geography received the most attention. In the last ten or fifteen years, geometric or spatial geography has attracted the largest number of productive and articulate research workers. Political geography has been recognized as a significant research question by most 20th Century geographers, but has been actively developed by only a few research workers. Perhaps political geography will hold the spotlight in the 1970's.

Parenthetically, the diversity of research interests raises a major problem in translating the geographer's way into a course. If we say that we want to reduce the lag between the actual research frontier and what goes on in the classroom, how do we decide which among these research questions shall be emphasized? If we are talking about the way of the past, the tradition of geography, then perhaps all five research traditions should receive emphasis in proportion to the research time each has received in the past century. If we say that we want to teach the way of the present, then a course should emphasize the research questions receiving the most emphasis at the present, hoping to bring students as close as possible to the research frontiers of today. However, since each of these traditions has persisted for so many years, each must ask important questions and should not be slighted. This is a problem and I do not know the answer.

Unifying Elements

I have defined geography as what geographers share. Let me turn now to what geographers share in each of the various traditions, to that which unites the geographical sciences. Why has geography held together in a single discipline? Why have geographers continued to read the same journals, attend the same conventions, and so forth? Part of the answer is found in the fact that individual geographers have often worked on different research questions at various times in their careers. Another unifying bond is common research technology and method. Geographers using similar research tools can understand each other even if the research questions probed differ as much as those of physical geography and political geography. Common understanding of maps as research tools, and of modern areal statistical methods, tend to unify them.

Another unifier among geographers is their commonly held set of values. I think that most American geographers would agree that we share at least three key values. One of these shared values is the humanistic or esthetic appeal of maps. A second value that geographers share is the virtue of direct observation, which they usually label as field work. A third value shared by geographers is a yearning for that which is comprehensive, that which can be seen as a totality.

The yearning for totality is the reason geographers have tended to push the area study approach; it is an important value that they are trying to get across. The ultimate geographic problem is to understand the entire globe as one single interacting system. Of all geographic values, this is the one that is clung to most tenaciously by geographers. The globe is ours and no one is going to take it away from us.

Geography is further unified by its system of communication, which includes both visual and verbal symbols. Maps are a major means of communication, as are diagrams and mathematics. However, the major geographic communicative device is language, including geographic jargon. It is because geographers share many concepts that they are able to communicate, even though they may be working on differing research traditions. Four of the most important concepts are:

1. Scale, and shifts in scale.
2. Areal association.
3. Spatial interaction.
4. Regions and regionalizing.

These major concepts hold together the whole system of geographic thinking; they span the five research traditions, and provide an important key to the "geographer's way."

From Geography Theories to Geography Curriculum

The objective of a geography course should be to communicate the geographer's way, of which I have identified two major elements. One element is made up of the five great research traditions, which give direction and thrust to the work. The other is the group of forces which unify the separate research interests into a single discipline: a common technology, a common value system, a common conceptual system, and a system of communication.

How does one translate the geographer's way into the concrete reality of a course? Reflecting the current emphasis on teaching concepts and structures rather than collected facts, "The Settlement Theme Course Outline" for the High School Geography Project stresses the understanding of ideas.

The course emphasizes the geographer's mode of inquiry rather than his accumulated knowledge. To develop students' ability to use geographic techniques in the analysis of problems they will meet in the future, calls for awareness of the orderliness in the arrangements of phenomena over the surface of the earth, and awareness of the interconnectedness of people and things in different places. Throughout the course there is emphasis on problem-solving which reflects the major research problems. We have also tried to bring into the classroom the excitement found at the frontiers of research.

The titles, content, and major research emphases of the ten units of the "Settlement Theme Course" are shown in the table. All the major research traditions are represented in the course, though with quite different emphases. Spatial geography, or location theory, has the most prominent role, reflecting the current strong interest of many geographers; it is present in all of the units, and dominates four of them. Cultural geography is dominant in units 6 and 7, physical geography in unit 8, and political geography in unit 9.

SETTLEMENT THEME COURSE OUTLINE

Unit	Title	Content	Major Research Emphases
1	Introduction	Statement of basic problems of geography	
2	Urban Geography: Intercity Analysis	Relation of city to site; land use; city growth	Spatial, Physical
3	Urban Geography: Intracity Analysis	City size and functions; relations among cities	Spatial, Regional
4	Manufacturing and Mining as Settlement-Forming Activities	Location of manufacturing; city size and growth	Spatial
5	Agriculture	Location of agriculture, and its relation to cities	Spatial, Physical
6	Culture Change	Culture innovation and diffusion	Cultural
7	The Habitat	Relations between man, his culture, and the earth	Cultural, Regional
8	Fresh Water Resources	Water needs, supplies, and management	Physical
9	Political Units and Political Processes	Interaction of political and geographic features	Political, Regional
10	The Frontiers of Geography	Unsolved problems	

Tools and Sequence

Since there is a strong emphasis on problem solving throughout, appropriate levels of research technology are introduced to help the student learn how to solve problems. There are simple statistical procedures, simple map work, and other tools from the geographer's kit. Students are given tasks which require that they observe things and relate their observations to various types of data about the things they have observed; for example, to census data.

Later in the course there is quite a bit of emphasis on the use of things that extend our ability to observe, such as air photos. Air photos are not direct observation, but they are about as close as you can get to direct observation, in a school situation, of large surface areas.

One unique aspect of our approach is that we start with the city, which is the most immediate part of the child's environment, and end eventually with the entire globe. We build from the city to systems of cities, using central place theory, which relates the village and hamlet to the city, and the city to metropolitan areas. We then move to the inhabited parts of the globe that are not highly urbanized--the non-Westernized or underdeveloped world--then to those parts of the world which are not inhabited, but cover a lot of the earth's surface. We finally end with the globe, which geographers feel must have a place in any course. In Unit 9, "Political Units and Political Processes," we stress problems of nation states inhabiting a single globe, as part of a single, interacting system.

Conclusion

The course is concept-centered. Concepts relevant to each unit were selected, but with a view to choosing concepts that are also common to a number of units. The final unit, not yet written, may summarize and integrate the conceptual structure, as well as pointing to the frontiers of research.

The inductive approach is used in the course whenever it is feasible. However, a healthy balance must be struck between the inductive and deductive, and times does not permit the inductive development of all concepts.

By and large, I am satisfied that the "Settlement Theme Course" reflects "the geographer's way."

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[1] National Research Council, The Science of Geography (Washington, D.C.: The National Academy of Science, 1965).

CHAPTER 7

CONFLICTING CURRICULUM OBJECTIVES, AND TEACHER TRAINING

Competition for a Place in the Curriculum

Taba: What does happen, or what should happen, to geography and history, which have traditionally taken up most of the time devoted to social studies when economics, sociology and other social sciences begin asking for space in the curriculum? Is it possible to make specialists out of all the children in all these subjects?

Fenton: I think that is the wrong question. We should not be concerned with what is going to happen to "poor old history!" The proper question is, What behaviors do you expect the child to exhibit at the end of his school career in the area of social studies? Then you define the behaviors, and the behaviors imply contents, materials, teaching strategies, and the rest. If each social scientist is prepared to fight to get his discipline into the curriculum, we will never get anywhere.

Taba: I agree.

McNee: Personally, I don't mind a fight, in the sense of competing in a free market. The people who make the decisions about curriculum content should be free to choose from among all the things the disciplines have to offer, and the people in the disciplines should be free to make the best case they can for their product. But I want to say that the kind of geography I want to sell to the schools is not in the curriculum now. Children should be exposed to the same kinds of problems that research workers are trying to solve, not to the insignificant questions that are now so common in geography as well as much of the rest of the curriculum.

Behavioral Versus Other Objectives

Sigel: How does Professor Fenton's statement square with what he is doing? Why is he concerned with defining the structure of history, if behavioral outcomes are the main objective?

Fenton: I did not know about behavioral objectives when we started our project; I am still learning about them, and find them very useful. We hope to achieve three kinds of behavioral objectives: attitudes and values, inquiry skills, and some content objectives. There are a number of criteria by which one can select content; only one of these is the structure of the discipline, phrased as analytical questions. We are using the structure of the discipline, phrased as analytical questions, as part of the process of inquiry, of hypothesis formation. We also have other criteria for the selection of content. Some parts of content are selected to meet the needs and the interests of our particular audience, which consists of able high school students. These students need content that is relevant to college careers. We also select content because it is related to problems that are important in the modern world. In studying Africa, for example, we focus on the problem of apartheid; and in India, we focus on the problem of economic growth. We also select content as a result of our judgments about the minimum things that any educated American should know, such as the identity of Pericles and Machiavelli. We have to admit that such choices reflect our own value system.

Taba: When you have such a broad range of objectives, aren't you concerned about whether you are covering enough history?

Fenton: It does not bother me that we are not "covering" enough history. You and I both know that the nation of "coverage" is a silly one. We cannot cover one-hundredth of one percent of all that is known anyway. But you could pick me up properly, because I have also said that there are certain minimum things that we should "cover." These come out of my own value system, and I am perfectly willing to make clear to everyone what my values are.

Hering: In the sociology project, an internal conflict is developing. Some people in the project are talking about developing a course in sociology, using the inductive approach; others are talking about evolving "episodes" that can be integrated into a government or history course.

Professor Fenton said he does not see sense in a chronological study of history, and in fact the other social sciences should be studied first before approaching history. I agree with much of what has been said about improving the curriculum, but how are we going to create students who are experts in economics, in geography, and all the other social sciences as well as all the other subject matter outside the social sciences? How will the poor elementary teacher, let alone the secondary teacher, manage all this?

Morley: When you write instructional objectives, as we are constantly doing in the school systems, you have to specify the components we have been talking about here. First, you have to specify some package of materials, titled in some fashion and containing a certain content and conceptual structure. Second, you specify how students are to deal with the materials, in terms of some taxonomy of behavioral objectives, such as Bloom's. The problem is not one of neglecting content or process, because you have to specify both. The problem is that, when this is done, the teachers are locked into a pretty precise operation. A lot of our teachers don't want to be squeezed that much. They ask: Where is creativity? Where are values?

McNee: It isn't a matter of choosing between content and process. The geographers in our project think in terms of a conceptual structure. But the Educational Testing Service people who are working with us keep saying that we have to state our objectives in behavioral terms. You have to keep up a dialogue about the proper relationship between the two.

Taba: In talking about content versus behavioral objectives, we are not taking a broad enough view of the whole educational process. Dr. Ralph Tyler, whom I would call the grandfather of behavioral objectives, listed four objectives of learning, in the Eight-Year Study, in the 1930's. One is knowledge; Dr. Tyler said that the trouble with knowledge was that it was not conceptually structured, and we are dealing with that problem now. The second is the area of cognitive processes: thinking, inquiry, question-asking. The third is values and attitudes. The fourth is skills. When you have taken care of concepts, knowledge, ideas, and so on, you have only done one-fourth of the job. The rest of the job which we have lumped under the "process" category, has to do with how the students learn and how the teachers teach, and unless that package is also worked out, three-quarters of the job is left undone. The knowledge package alone, no matter how it is put together, does not get these other things done.

Saylor: Yes, we must recognize different categories of objectives; they don't all fit under one heading. Some objectives can be properly stated as immediate behavioral outcomes; others as behavioral potentials--the knowledge and understanding needed for behavior later on.

Fenton: Among the behavioral objectives related to attitudes and values, I see three kinds. One kind is behavioral attitudes which are necessary to important social processes, such as teaching in the classroom. We must insist that children do not throw spitballs and stink bombs in the classroom. There are also procedural values; for example, that subjecting judgments to the test of evidence is a better way to proceed than accepting something from authority. Then there are substantive values; for example, that democracy is better than communism. We have a right to teach behavioral values; and to try to develop certain procedural values; but with regard to substantive values, all we have a right to do is to ask the students to examine them, to reflect on them.

Fenton: We need much more than materials, and I am sure Professor Senesh will agree with me. We need an enlightening and convincing explanation of what we are doing, of what our objectives are, in order to persuade the consumers in the free market, as Professor McNee puts it. We need to develop, with an enormous amount of help from teachers, the various possible teaching strategies for our materials, and ways of supporting and elaborating our materials with methods books, films and other aids. And we need a major commitment of resources to pre-service and in-service training. For one thing, all the NDEA projects ought to get all of our materials; then the teachers should analyze the materials and report back to their colleagues on them. None of this is being done now. The government is putting money into many separate projects and activities, without getting the additional benefits that would come from cooperative relations among them. An organization like the Consortium is an enormous help on this problem.

Organizing the Disciplines for Teaching

Senesh: I would like to make a statement on the matter of crowding the curriculum with more and more disciplines. I am not asking more time to teach many social sciences than the time already being used today to teach under the flag of social studies. And I am not arguing for the teaching of economics as a discipline. I tried to make clear in my talk that I am not talking about a subject matter approach, but an orchestration of all the social sciences, showing their relationships to each other as a background for the development of teaching units. I am talking about problems and units in the curriculum, not disciplines; the disciplines are used as they are needed, usually with one or another discipline playing the chief role at one particular time.

In developing teaching methods for the new materials, it is very important that the teaching of skills and the teaching of subject matter be closely related--using problems, pictures, simulations, and games, to teach both skills and content. If a teacher tells me that she cannot teach social studies in the first grade until

February, because children cannot read sentences until then, I have to ask, What kind of sentences are you teaching them? Don't they have any content? What is the sense of teaching sentences if the sentences don't make sense?

The problem of training teachers is a very difficult one, but I have some suggestions. The first suggestion is not to add some more introductory courses in the social sciences, each with an 800-page introductory text. What is needed is cooperation among the disciplines, with the focus on solving social problems. I would be delighted to teach a course in cooperation with Professor Fenton and equally able and imaginative people from the other social sciences. I am sure we would never have any disagreement, or feel that one is pushing the other out. All I want is the opportunity to sneak in the economic analysis that is necessary to understand why farmers demanded cheap money, when Professor Fenton is talking about the farmers' demand for cheap money. When the gold rush is the subject, I don't want the children to connect it only with saloons in San Francisco; I want them to understand the economic causes and consequences of the gold rush.

When the problem of cooperation between the social sciences in teacher training is solved--and it should not be too great a problem to solve--we still have a very big problem. That problem is cooperation with the methods people. There is practically no relationship between the people in methodology and the people in subject matter. They work in adjoining buildings, and never see each other. Nothing moves from one building to the other except the students, and after four years the students might well ask, "Are all these trips necessary?"

English: I agree with Professor Senesh, particularly regarding the teaching of a lot of different and unrelated courses in the various disciplines. I wonder if that is wise, either at the college or high school level. Knowledge for each course is learned, tested, and forgotten. Some relationship and continuity between the disciplines is needed.

McNee: I think Professor Senesh has given the answer to the problem of unrelated disciplines and rote learning. If courses are taught by the inductive approach, the problem is solved.

The Problem-Solving Approach

Berlak: I am not convinced that the problem-solving approach is the answer to all our problems, or that it has any value at all. In the first place, we haven't defined what we mean by problem-solving, or what we mean by problem-solving as an educational objective. In the second place, we do not know that problem-solving ability carries over from one subject to another, that teaching problem-solving in geography will help students solve problems in history. I think each of the curriculum projects has the obligation of thinking through these two questions before they rely so heavily on the inductive approach.

McNee: The reason I am so convinced about the necessity of teaching the inductive method is that it is essential to science, and we have a culture to which science gives the main thrust. Scientific method is the highest value in our society. There are other values too, but this is a world of science. In order to prepare the student for the kind of world in which he lives, we have to show him how science works and what the scientist does. Teaching students what scientists have learned doesn't do much good, because half of what anyone learns this year will be obsolete in ten to fifteen years. That is why I am so strong on problem-solving.

Sigel: But you solve different problems in different ways. A problem in aesthetics isn't solved the same way as a problem in geography or chemistry. We have to define what is meant by problem-solving, and to discover the specific operations required to solve problems; then we need particularly to reinforce the understanding and behavior that is general rather than specific to certain kinds of problems. Problem solving is not the private domain of certain content areas.

Taba: I would like to follow up the question of what are the skills of problem-solving. There have been some sacred routines for problem-solving for twenty-five years, and the problem with all of them is that it is a mechanized process: there is a ritual, but no understanding of the process. The people who are talking about problem-solving have the obligation of defining the necessary skills and the methodology; and this knowledge must then go into teacher training.

Use of Concepts in Problem-Solving

Featherstone: I want to go back to Professor Fenton's comments about the place of concepts and generalizations in planning a curriculum. I agree with him that they can be useful in the preliminary organization of course material. And I also agree with him that the real objective is to get the child to develop his own concepts and questions. The really successful course is one in which the student moves beyond the planner's design of the course. What I still do not understand, though, is how you relate behavioral objectives to materials. Could you give some specific examples?

Fenton: We want our students to know how political decisions are made in any sort of government. We gave our 10th grade students some diaries written at the court of Louis XIV, from which they could independently form analytical schemes to explain the government of the time. There are some interesting things in the diaries. For example, one diary tells about a king who is stopped during a walk down the street by a courtier who asks for and gets a favor. This is an access question; how do you get access to a decision maker? There is a lot of information about who gets to be a decision maker. The king becomes one because he was sired properly. A lot of other people get to be decision makers in the same way. Still others are recruited from various areas in the society because they have particular sorts of backgrounds. The diaries give much fascinating information about the recruitment of political leaders and about access to political leaders. There are interesting questions about institutional arrangements: in what institutions should decisions be made? The information and application of analytical questions from political science and history helps the students understand more about political structures.

Featherstone: I have a feeling that Miss Plessner and myself are doing exactly the same thing in the Colonial course. It amounts to teaching children to use induction, analysis, evidence, and testimony, and to make inferences.

Fenton: We built these questions into the 9th grade political science course, and then we challenged the students to use them in the 10th. What delights me is that they sometimes turn up with questions that didn't go into the 9th grade course. They were able to generate analytical questions that they had not encountered in previous courses.

Taba: You are taking it from the angle of what questions it generates. Let's look at it from the angle of what skills are required; there are at least four. First is the ability to identify pertient points in the diary; to know what to look for. Second is relating one point to another. Third is going beyond the material given in the diary to make inferences. That is very difficult; most of us stick closely to the data given. Finally there is verification of the universality of whatever inference is made. What are its limitations? These skills refer to the process of analysis, something different from question-asking.

Fenton: First you ask questions, then you make an analysis of the data available to answer the questions. That is, you hypothesize and then you validate, abandon or alter the hypothesis.

Taba: Yes, those are the skills. My question is, Are these teachable things? And are they generic enough to apply to a political document, a diary, a chart, a map, or whatever?

Sta~~r~~ke: I agree with Professor Fenton about the desirability of using behavioral objectives in curriculum construction, and it is delightful to hear a historian talking like an educational psychologist. But I have recently run across an example to shake my faith, a little, in behavioral objectives. The AAAS elementary science project, with behavioral scientists well represented on its board, has a curriculum which is highly oriented to the processes of scientific inquiry. Some scientists who are starting to raise strong objections to this curriculum, because the structure of scientific ideas has been slighted by the emphasis on process. What I expected to find in this discussion has not come about. I expected most of you to favor the conceptual, or structural, approach. I am very dubious about the conclusion that the processes we have talked about are far more important to the curriculum than the content, the concepts, the generalizations that are being pushed down the priority list.

Teaching Values

Shaver: I agree with Professor Fenton's earlier comments that we need to be cautious about inculcation of values. But it is not always easy to draw the line between procedural and substantive values. In our society we have certain commitments as individuals and as teachers, perhaps including the obligation to inculcate values that go beyond the procedural ones. I would be very upset if a child in my class said, "People do not have a right to equal opportunity. It is a ridiculous notion." I would have the feeling that this child is out of touch with reality, that perhaps his home and his education had failed him.

Senesh: I would not be at all upset by the child who complains that people do not have a right to equal opportunity. This would be as exciting to me as a new epidemic is to a medical student. I would pick up the issue, asking "Does a problem exist with respect to equal or unequal opportunities?" I would bring out pictures--protests before a courthouse, for example. I would establish the existence of a problem, as the first step, by showing the symptoms of the problem.

Next, I would define the problem, that people want something that is not provided for in our system of institutions; and social problems are always of this nature--a disparity between desires of people and the social arrangements.

Next, I would look for all the relevant facts that I could find, from the sociologist, the anthropologist, the political scientist, the economist, and so on. I disagree with the people who deplore the fact that the facts of the sociologist are different from the facts of the economist, as though this means that the facts of one of them--or, more likely, both of them--are wrong. The problem of discrimination is an excellent example of a problem for which we can use the expertise of many disciplines, which calls for great skill rather than for deploring the different views taken by different disciplines.

After the scope of the problem had been established, I would ask what its causes are. From economics, I would sneak in the analytical tools of market theory and welfare theory, to explain the existence of unequal opportunities. I would ask the other social scientists to use their analytical tools to help explain the causes of the problem.

Finally, I would propose solutions to the problem. What can individuals do to solve it? What can be done cooperatively? What can be done through the government?

This is an excellent example, on which we can build an integrated social-science problem approach. I think I would even bribe children to bring in problems like this.

Teacher Training--Getting the Materials Into the Classroom

Fenton: I do not know how we will resolve the question of teacher training. It will not be through institutes such as the NDEA institutes last year. There were 3,200 teachers in history institutes and 1,400 in geography institutes. I don't know how the geography institutes were, but the history institutes were very inadequate.

McNee: The geography institutes were still worse.

Fenton: The institutes did some good things for the teachers, and I don't underestimate that, but they are not going to have much effect on the behavior of the children. Most of the historians who ran the institutes looked upon their functioning as that of communicating the latest research results on Jacksonian democracy to the teachers. Such knowledge will not be of much help to a teacher who has a class of disadvantaged eighth-grade children in a big city.

Hering: But Professor Senesh seems to feel that there are a lot of teachers who are all ready to use new ideas and new materials, who say, "Fine, just give me the materials; I want to teach economic concepts in the first grade."

Featherstone: I think it would be extremely useful if we would stop talking exclusively about general concepts and principles and would talk about specific classroom materials, as illustrations of concepts and principles, as Professor Senesh has just done. I have had trouble today because I can't see how the things we are discussing would actually work out in the classroom. Talking about theoretical curriculum development should always be done with reference to specific classroom materials. We could be clearer, for instance, about this whole business of behaviorally-stated goals. It would take us more time, but I think it is absolutely necessary.

Gibson: Some of our work at the Lincoln Filene Center, at Tufts University, is relevant to the comments that have just been made by Professor Senesh and Mr. Featherstone. We have a K-6 curriculum project in the area of racial and cultural diversity, dealing with the preparation of instructional materials that provide an alternative to the "lilly-white" elementary social studies textbooks and readers that are still common. These materials have behavioral goals, and they are concerned with problem-solving. We know full well that instructional materials are not going to do the whole job in this sensitive area of racial and cultural diversity, and we are trying various strategies in the area of teacher education, which you might be intersurvival. But minor alterations can be justified, so the rule that killing is wrong must be construed as just a rough guide, not a universal truth. For killing in self-defense when there are no feasible alternatives is an exception, since the love of life is in general stronger than what one stands to gain by taking another person's life. The self-sacrifice rule in turn interjects an exception to the self-defensive rule in the case where the other individual's life is at stake and his value to others is greater, (or where several others' lives are at stake). In the same way, despite a prima facie commitment to helping others, or others in need, the moral man in an immoral society is in no way obligated to give hand-outs to anyone who asks for one, even if they need it. Indeed the reverse is the case, since it is clear that rewarding laziness or making it harmless is normally contrary to the interest of both the individual and the society. So there is excellent basis for the general higher-level principle that the obligations to others only begin when the resources of the recipients are reduced to a risky level. A society does not run better if the industrious (or fortunate) and benevolent men beggar themselves to feed the lazy--and that is why it is not part of unselfish morality to do this. It is of the utmost importance to recognize the foundations of moral adages if they are to be interpreted and applied correctly. The most obvious proof of this emerges from examination of the response to changing conditions. If we are taught moral maxims as undying truths about some abstract realm of moral values, we shall have excessive difficulty in adjusting to changed circumstances. Inertia is of some value, but needs to be rationally assessable.

As a case in point we might take a contemporary example. Perhaps the most interesting novel moral problem in mid-20th Century America arises over the conflict between the principle of aid only to the needy, which we have just been discussing, and the economic problems of overproduction. It is all too clear that an oversimplified conception of the inviolability of moral principles (that is, excessive attitude inertia with regard to these rules) is leading the rich to imagine themselves exploited when their contribution to taxes is partly used for substantial compensation and retraining programs administered without extremely rigorous (and hence much more expensive) investigation into the qualifications of those assisted. Shocking tales of able-bodied loafers with TV are passed around with the canapes in Santa Barbara and Greenwich, Connecticut. The other side of the issue might be put, crudely, by saying that unless the rich are taxed and the money used to make consumers out of the otherwise indigent, the rich will lose more income (because of the drop in market demand) than they do from paying taxes. Putting it another way, it's entirely right that the devotedly lazy man should be on relief since he'd otherwise be filling a valuable space on a production line and not doing a good job. It is still an advantage (and becoming a privilege) to work in this economy, for anyone who does not set great store on laziness, because life on relief is extremely poorly recompensed. It may not be a duty to consume and encourage consumption, but it sure helps a capitalist economy; so apart from the moral consideration, the dole is a better treatment of unemployment than starvation for both the rich and the poor.

To see the necessity for a change in attitude about work, consider the possibility that automation will result in 75% unemployment. Will the unemployed be 'lazy good-for-nothings,' or even the 'unforunates'? Clearly not. The slogans, phrases and attitudes of a labor-poor economy are irrelevant to a consumer-poor one. Suppose that a gradual increase in the level and type of unemployment benefit raises it to the point where it makes possible a way of life that many people find very pleasant. Will that have 'corrupted their moral fibre'? It may destroy some of the incentive to get a job, but since there aren't nearly enough to be got, is that bad? The revolution towards this eventual state may well take place without being clearly recognized, e.g., by reduction in the working week, increase in the normal years of education, vast developments in the recreation, conservation and assistance fields so that more people will find work and play indistinguishable. What matters about people is not what they do to earn their money but what they do; and we shall just have to work out a system of appraising people which makes that distinction less dependent on their employment status than was appropriate a generation or two ago. Even then, too little distinction was made between the money a man earned entirely owing to his own efforts and that which he earned because of the good start he got in life owing to his parent's wealth or influence or education, or which he got because he was one of the lucky ones in the vagaries of the business market. Money from luck, or from others--whether parents or the government relief funds--is equally irrelevant to merit.

All this is said from the point of view of the internal state of the U. S. economy. Take the U. S. as a spottily rich country in a world of poorer ones, or take a good look at the poverty spots in the U. S., or at those suffering from disease or mental disorder rather than economic handicap, and we must concede that there are still many obligations to the community of man that make idle consumption indefensible, by rich or poor. For there is still much need to do something worthwhile for those who really need help. So, on the moral grounds alone, the dole should be safeguarded, the foreign and domestic Peace Corps expanded vastly, internal and international development and assistance funds increased. And such endeavors can be supported on both a voluntary and a paid basis: to be unemployed does not mean to be incapable of doing worthwhile and rewarding work. Thus we can still find value in the condemnation of laziness, as long as it is not identified with unemployment.

The educational system in this country is too much influenced by a wealthy class that imagines itself knowledgeable about economic reality and morality because its members have money, a degree and no jail record. (One might as well assume that the best-paid professors are the best teachers.) This influence is probably the main reason for the general ignorance about the cruder facts of economics and morality, which presently makes federal intervention a necessity. Cancel federal taxes and call for voluntary contributions to support the armed forces, education, charity, and economic controls and aids, and the country would be destitute and conquered within a decade, and who really doubts it? Yet there is constant advocacy of this and related measures by eminent politicians of both parties. Even long-term self-interest is beyond the average man's capacity today when fat short-term gains leer invitingly. Couple this lamentable defect of will with gross deficiencies in education about the most fundamental issues of morality and economics and the result is a nation whose only hope is the capacity of its elected representatives to educate themselves in office, to transcend the offered bribes, the pressures of propaganda, and the short-term charms of re-election, and to apply rational long-term unselfish considerations. The prospect is fascinating.

This necessity to switch from the work-as-duty to the work-as-privilege attitude is intended to illustrate the importance of retaining enough flexibility to rethink our attitudes and re-express them in new moral rules. The changes due to advancing technology and education can undercut a system very fast, and nothing undercuts it faster than a parental generation producing attitudes that were appropriate in an earlier stage of the society, when the children can see perfectly clearly that the facts no longer support such attitudes towards, e.g., gainful employment, premarital intercourse, religion, negroes, Japanese, etc. So attitude-modifiability is crucial; but it is also essential that our attitudes be rigid enough to survive under pressure. The tension between these considerations is often the force that drives the moral rack. A balance between them must be struck, and somehow expressed. So there is a double difficulty. For, even if the best way of life were known, it would undoubtedly require simplification in order to be expressed in an easily understood form and there are always many ways to simplify a truth, some of them contradicting others. But simplification is necessary, not only to make it easier to teach children and to remind ourselves of the truth, not only to make discussion more effective by providing us with useful approximations of various degrees of refinement, but also because attitudes are somewhat indelicate instruments and the cost of commitment is imprecision. Attitude inertia is desirable--but we pay something for it that the phrases "blind loyalty," "blind faith," and "blind obedience" convey. The commitment to 'higher values' comes hard at first and to make it possible we have to sacrifice some refinement in the analysis of consequences, countervailing considerations, etc. Sometimes all we can train ourselves and others to do in the way of justification is to appeal to some very simple general principle or value: "It doesn't seem fair" we say, or "That would be stealing," implying that justice should and theft should not be done.

Thus we must regard moral maxims like the Ten Commandemnts as doubly dubious guides. Of course, they cannot be devastated by pointing out a few of the apparent counter-examples, such as justified stealing. It is of the nature of such principles to state norms (i.e., what is normally or properly or ideally the case) not exceptionless general laws. But they may still be wrong in basic conception and they may be wrong through over-simplification. To decide whether they are right is very difficult just because it requires an exhaustive analysis of the current interpretations of the rule as evidenced in the circumstances in which it is applied and the procedures for justifying exceptions. "Thou shalt not kill" has been interpreted as a prohibition of killing flies, hunting deer for sport, slaughtering cattle for food, suicide, euthanasia, and abortion. Now a moment's thought about the rational justification of the rule shows that there is something very odd about applying it to these cases. The rule is an attempt to preserve what is usually the highest personal value of members of the moral community. But in the cases described, what is being terminated is something not wanted by the only person who has any legitimate interest* in it. So the assessment of a moral maxim like this will depend very much on whether killing is taken to mean "the taking of a person's life against the person's will." And in addition there is the problem of acceptable excuses and acceptable degrees of simplification. In assessing existing maxims there is also the problem of confusion due to myths about their source which may lead to further divergence from any rationally defensible system.

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*"Legitimate interest" here means (roughly) an interest of such a kind that the attitude of respect towards it offers prospective net benefits for the community in the long run.

Behind such issues of interpreting and assessing moral maxims, or as the primary problem of application, there lies a basic issue to which we must now turn. To whom do moral rules apply?

In its basic form this is the problem of the moral franchise. What are the limits of the moral community? Who should heed them or be treated in accordance with them? Who is to be treated as equal? Servants, slaves, morons, infants, unborn babies, juveniles, animals, bankrupts, bankers, kings, extra-terrestrials, intelligent robots, communists, fascists, sadists, psychotics, criminals?

18. The Moral Franchise: Who is equal?

The inertia of the moral attitude can obviously carry us into difficulties and it is of great importance that its blunt ways be refined as far as possible, without significant loss of its advantages. No exact rules can be given for weighing the importance of, e.g., the dispensing of what appears to be justice against the importance of apparent consequences. We can only attempt to teach the right answers from discussion and training based on many examples, as we teach the writing of grammatical English. But there is one task for which rules have seemed more feasible, the task of describing the limits of the moral group. And whether by rule or by training, the limits must be known if morality is to be fully applied. So it is of great interest to examine the problem of the 'proper' attitude towards (a) swatting flies, (b) pulling off their wings and (c) breeding them for the sole purpose of feeding ornamental goldfish--by comparison with analogous treatment of microbes, plants, dogs, adult women, the aged, and other minority groups. It is easy to state, and even to make precise, the rule that only humans (or white humans or free humans or intelligent humans) should be accorded significant rights. The only problem is to decide whether it's true.

Recalling the arguments for the moral attitude towards others, we notice that some of them depend on the potential gain in contributions from and for prospective members to the group, and others on the advantages for the individual of certain standpoints from which to assess potential experiences. Let us examine one example of the way in which such considerations apply to the franchise question. Why should we feel obligations towards the terminally or life-time sick and insane? (including upon occasion the obligation to kill them). Certainly not because of the potential contribution of these individuals to the group. But the advantages of a certain attitude in a group which will probably exist for several generations include those where roles are exchanged. It is because of the desirability of Good Samartian insurance for ourselves or those whom we love (the 'immediate' group) that care for the indigent can be defended.* Membership of the immediate group, however, is a highly contagious condition. For if you care for North and he cares for South, whom you do not know, you have automatically acquired an interest in South's welfare--and similarly in South's sons and daughters, friends and colleagues, and their friends, too.

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*The reader must constantly remember that morally grotesque notions such as defending care for the sick are a rational necessity when assessing or formulating morality, and only an absurdity when, having determined that the move is a sound one, we shift into the moral gear.

Blood may not always run thicker than water, but add the ties of blood to the bonds of friendship-chains and you have a substantial chance of being under an obligation to any stranger you meet on the street. Thus you have some direct or derivative interest in the welfare of most of the people you know, and it is a great benefit for all of these people you know, and it is a great benefit for all of these people to have Good Samaritan coverage. The only feasible way for this to be arranged is by supporting the pressures towards morality on as many as possible, which in the usual circumstances means allowing the same pressures to be put on you (and your immediate group). Doing this, as we have argued, also provides gains of other kinds (adaptability, peer-esteem, sanction-avoidance, etc.). So, of course, people *should* be kind to the unfortunates.

Unfortunate *people*, that is. But the most reliable sources assure us that our chances of turning into an elephant or a mouse, now or later, are exceedingly remote. So why be nice to mice?

Normal Western mores countenance trapping or poisoning pests, including mice, but draw the line at deliberate or careless cruelty to them. But a substantial minority, perhaps disproportionately female, join many asiatics in regarding even such 'defensive killing' as unjustified. Another minority, including the Hopi, think wanton cruelty to small animals is not a moral matter at all. Who is right?

The four basic considerations bearing on our attitude towards animals are (i) that preserving the simplicity of the negative moral attitude towards casual infliction of pain and the positive one towards rewarding loyalty and service is important; (ii) that the chain of affection can extend into the animal kingdom through people to whom we may be linked even if not animal lovers ourselves; (iii) that the cost of kindness is in general small or zero and its benefits--in terms of the adaptability advantage or peer-esteem or training efficiency--is sometimes considerable; but (iv) still a point comes, sooner with mice than men, where the cost of equal treatment is too great since the potential gains for including a mouse in the moral community are simply not comparable with those a man offers. Together, these considerations rule out the extremes implied in a literal interpretation of St. Francis' phrase 'little brethern' (which he applied to his lice) and the more recent whom 'treat them like animals', which usually refers to practices that are not defensible even for animals. When it comes down to such pressing practical questions as whether it is really immoral to eat turkeys at Thanksgiving or use inexpensive neck-breaking mouse-traps, rather than expensive, slightly less effective, live-catching traps (releasing the victims somewhere out in the country) we must concede that a final resolution may not be obtained within these pages. But the lines of thought that must be followed out are clear, and become highly important when we generalize such problems into the issues over vegetarianism and blood sports.

In such cases two important but unsettled empirical questions concern (i) the effect of callousness towards animals on interhuman attitudes and (ii) the extent to which this effect is unavoidable. The answer to this and associated questions about ease of learning determines the weight we should give to the first factor in the list above. Lacking definite answers, we must use a precautionary strategy, discusses below. But there are other important points. There is the question of consideration for the sensibilities of others (the second factor in the list), which is relevant even when those sensibilities are misdirected, up to a point. (For a morality that only took account of the preferences of totally reasonable beings would have remarkably little value for us.) There are the adaptability advantages of affection towards animals and birds which are obviously exemplified in the pleasures afforded to many people by their pets. Related but not identical with this source of reward from animals is the obvious benefit provided by those animals which serve or can serve men directly as carriers, guardians and hunters, and can thus be said to 'deserve' consideration, and the avoidance of wanton cruelty, on almost the same basis as the human servant, and those which do not. But even if the animals do contribute directly to the labor force, and even--within limits--to the police force, they are certainly limited in their intellectual powers and hence their general utility when new circumstances arise, calling for intellectual and moral decisions. Indeed, they never become moral agents, only the agents of moral agents; they never have moral duties, though their duties may be moral and we may have moral obligations to them. So the network of moral attitudes binds us to treating animals as having some call on our moral sensibilities.

Does this not mean that killing mice to keep them out of the kitchen is highly immoral? Is not this precisely like the treatment of slaves by the amoral slaveowner--ruthless when convenience dictated, kind when it suited him, that is, recognizing no rights at all? (For to recognize an entity as having rights implies that one acts more favorably towards it than if one's own convenience were all that was at stake.)

There are important differences. Nothing is held to excuse wanton cruelty even to minor mammals, so they are morally accorded a degree of respect which distinguishes them from slaves regarded as mere objects of convenience, as automata. The justification for this is partly in terms of the negligible importance of the pleasure and conveniences associated with wanton cruelty compared to the possibility that cruelty once tolerated becomes an increasingly casual matter. Small loss, some expectation of substantial gain. Now when a substantial practical difficulty arises, such as contamination of food or destruction of the house structure, and no alternative except the painless extermination of the pest will suffice, the cost of extending the franchise to animals may be held to outweigh the risk of debasing character (in this case by making killing acceptable), upsetting others, reducing possible gains from affection, etc. Of course, there usually is an alternative, like the live traps discussed above, but here the practical inconvenience of carrying it out must be weighed against the small differential in preserving the attitude related to morality that is involved. These are empirical hypotheses that are being weighed and our present state of knowledge about them is minimal. It has been widely held that the hunter or trapper does become a less moral being towards his fellow men as a result of his occupation. But it has also been widely denied. At the moment, it would be impossible to argue conclusively for either position, let alone its extension to the household pest level: but ignorance of consequences does not make a moral decision impossible, or even more difficult, it simply leads to a different one.

The attitude towards animals that we have just described is very like the attitude of what used to be called 'the more enlightened type of slave-owner' towards his slaves. And it is very like the attitude that many people have towards those who are in their power for emotional rather than political reasons--our "devoted slaves" as they called themselves in earlier centuries. Affection--to a point; consideration--to a point; beyond that the wasteland of exploitation or disregard. Indeed, it is very close to the attitude of most people, the distant alien people they never see. It is enlightening if not edifying to reflect that there should be so much similarity between this and the attitude of small boys and experimentalists towards rats.

The emergence of the concept of universal human rights is not entirely a discovery of what was previously true but unrecognized; it is partly the creation of a new social arrangement more suited to a society in which education has become widespread. For once people begin to understand their own powers and see their long-term interests for what they are; a universal franchise is quite clearly the only workable arrangement. It is the most stable balance of power--although this is neither the only root nor the only flower of the moral system. The lesson that the wolf-pack learnt took man a long time to express linguistically, but once it has been done, and as long as memory persists, the system of social relations can never revert to the master-slave stratification. It is the fact the animals lack an inferential language and the intelligence to reason with it, rather than that they lack power, that keeps us from having to extend the franchise. "Insects of the world, unite" would be a chilling war cry, in face of the vast disparity of numbers--thousands upon thousands for every man. That a group has learnt the lesson of cooperative power is not the only reason for extending the franchise to them, of course (cf. the sick), but it is a completely sufficient one. This lesson, that led to the labor unions and to the few political revolutions that have aimed at and achieved freedom, is simply that if all will commit themselves to sacrifice for the common cause, the chance of sacrifice being needed will be reduced and the expectations of other gains vastly increased. A minority, if it stands together, has enormous power in an industrial society. In the limit, a single totally committed man has the colossal power of a rifle or a bomb. If there was one politically-motivated lunatic exploiting this power in every million citizens instead of one in a hundred million, every generation, this nation could probably not maintain its present form of government.

To what extent is society at the mercy of sane but ruthless members or groups? And to what extent does the universal moral franchise increase this susceptibility? Of course, a single man can selfishly exploit society for his own ends if he is already in a position of great power such as the Presidency. And he frequently does, in many countries. But the system of checks is moderately effective with regard to most long-term villainy in the U. S. and can certainly be made so elsewhere. But any two or three committed men could present a desperate threat to the nation, if it were not for a couple of practical difficulties which lead to a general point. If each could count on the others to keep to the bargain they could draw lots for the role of assassin-elect and blackmail the nation with a promise of Presidential assassination. They could demonstrate their power with a near miss or a success followed by the suicide of the assassin and the repeat of the threat--whether to the same or a later President is unimportant. For it is still--and probably always will be--extremely easy to assassinate the President if the assassin has little concern for his own safety. But exactly the attitude required for willingness to profit from such extortion counts against the trustworthiness of the agent whose lot turns out to be drawn. The other practical difficulty with this plot, which would trouble even the survivor, lies in collecting and enjoying the ransom. The bond between the members of a self-interested assassins' group is thus too feeble to be analogous to that bearing on the moral attitude, especially because it is specific to one plan and one period of time. The moment that we shift to the case where the assassination is motivated by considerations of principle, e.g., as the only way to break the grip of a despot, then it can be seen as a cause that is good in itself, deserving of sacrifice, etc. When benefits for others are part of the calculation, the assassin can have a motive that transcends the risk of death; and hence most assassinations are politically rather than selfishly oriented. The assassins' group is too small to exploit the rest of the country; but a small group can do it, at least for a while, like the whites in South Africa, or the Roman citizens in the Roman Empire.

The Romans had quite a respectable in-group morality, which they had no trouble at all in not extending to the slaves. But they were aided in getting this past their consciences by the fact that this arrangement occurred as part of the natural evolution of social structure. If today one attempts deliberately to set up a basis for discrimination on a foundation of mere advantage, one has a trade-association, union or crime syndicate and not a morality. Synthetic gems are still synthetic and that knowledge can affect their value even when the stone is the same. We know too much to be innocent exploiters, and those we would exploit know too much to make it easy. And yet we still try hard to cheat--for the use of prisoners-of-war in labor camps in recent wars is pragmatically hard to distinguish from the Romans' practice.

If slavery today would be immoral why doesn't it follow that the use of mousetraps is immoral? Is it just that it's easier to identify mice visually than negroes? In the first place, in terms of our earlier discussion, the casual use of cruel mousetraps isn't immune to moral criticism. In the second place, there are certainly intrinsic differences which make swatting flies and crushing microbes considerably less wicked than killing people, and thus suggest that killing mice isn't quite so bad as murder.

Begin by considering microbes. What does a microbe lose when killed? On the one hand, all that he has. But on the other, very little; a basic consideration must be the extent of an entity's awareness of and feelings about life--otherwise cutting flowers and pruning trees becomes cruelty. It's not true that what you don't know you have you can't lose; but it is true that if you don't know what it is to have you can't know what it is to lose. This argument applies equally to the avoidance of pain, the desire for life, and the more sophisticated values. So we deprive the microbe of nothing of any possible significance to 'him.' As we move up through the jellyfish to the molluscs and the mammals, the argument becomes less decisive but not insignificant. This doesn't mean that a snake values its life, except metaphorically, but the metaphor comes closer to literal truth as the organisms more clearly exhibit pleasure and pains instead of just reflexes. It is marginally plausible to say that a snake likes sleeping in the sun and dislikes being hit with a stick. Of course it treats the first as a goal and the second as something to be avoided. That's not enough to show it enjoys the first and dislikes the second. The further element in this claim is the capacity of the organism to perceive its own condition (cf. Man chapter). It is not accidental that the hierarchy of intelligence is about the same as the hierarchy of sensitivity, for both depend upon the capacity for symbolic representation and discrimination. So the snake may be a marginal case and the snail sub-marginal, but the mouse is surely sensitive to pain and fear and deprivation. Taking life at all may be a little wrong, but taking a full life is more wrong. To stamp on the skull of a small shrieking mouse without thought, or to cheer the choreography of ritualized bull-slaughtering is surely to show a lack of the sensitivity to similarities that is an important part of moral reasoning.

We have noticed some important differences between a compact to crime or even an organization designed to exploit its power advantages in the long run, and the moral commitment of mankind. An interesting further point emerges from the case in which an assassin's group threatens to kill the President and demands money to refrain. To pay the sum demanded would encourage repetition of the crime and disregard of other laws as well. Not to pay probably costs the President's life. There again we have the difference between the immediate-calculation best choice and the long run best choice. On the small scale, this is why there is such a difference between the viewpoint of the police and those approached for ransom in a kidnapping case. The police are concerned about the long-run frequency of kidnapping, and this will be reduced by refusal to pay the ransom. The ransomee is more concerned with the welfare of the kidnapped person, and this will usually be best served by payment. It is not pure selfishness that motivates the distraught parent, but it is certainly an overbalance of affection for his own kin at the expense of the kin of others.

This situation demonstrates one of the substantial benefits possible for the participants in moral subgroups. If any subgroup can make a binding agreement in advance not to pay any ransom, and publicize this, it will ensure its safety from kidnappers. Now, simply getting its members to put up a large sum, even their entire fortune, as a bond on this covenant will certainly not prevent them from cracking under the pressure of the moment. But each member of a group which has absorbed the group point of view (perhaps without commitment to the general moral attitude) will be committed and the protective system will work as long as would-be kidnappers believe the group to be men of their word.

Similar agreements with respect to other kinds of threat can be much more widely used than at present; their success in the form of labor unions should be taken more seriously. Returning to the original point, the power of a subgroup to enforce its will on the majority is materially reduced in a society where considerations of the general welfare are paramount, since attempts to exploit immediate anxieties will be largely unsuccessful. Nevertheless, even a very small minority--be it the doctors or the truckers or the filibusterers--have an enormous power if they apply themselves to the problem of maximizing their leverage with intelligence and subgroup-selfless commitment. Even if two men cannot hold a rational nation to ransom for the life of its President, one small group can threaten to and often does use its power to cause billions of dollars of loss to the nation as a threat with great effect. The careless, ruthless or disproportionately selfish use of such power cannot be tolerated by a nation any more than the careless or ruthless use of strike-breaking forces. The arbitration of industrial disputes is consequently an extremely difficult and important task, requiring a combination of morality, diplomacy, technical and legal knowledge that is not generally receiving the recognition and rewards it deserves. An exception which deserves more attention is the arbitration court system of a country with compulsory industrial arbitration like Australia. Settlement of strikes by labor-management negotiation simply encourages sacrificing the consumer whenever possible, and so is intrinsically deficient. The fact that two disputing parties are represented doesn't mean that all interested parties are represented. The horrified protests about government intervention in such negotiations are simply rejections of what should be the consumer's representative.

In power terms, then, the minority is vulnerable to persecution but also capable of dictatorship. The only compromise that has any significance beyond mere expediency is the system of social justice in which each man has the right to equal consideration in the making of those arrangements which lead to differential treatment with regard to recompense, security and the conditions of life for him and his. Thus to the degree that men exercise their vote rationally and knowledgeably the right to an equal vote will yield greater benefits than any other arrangement. To the degree they do not, they destroy the advantages of the universal franchise, with one important qualification. Contrary to the view of political snobs, commonly heard today, the existence of many voters who are stupid, prejudiced, or short-sighted does not make democracy a foolish system. For the justification of democracy today lies largely in its superiority over any feasible alternative, and not in its intrinsic perfection. The self-interested election of representatives, even by an imperfect electorate, has a long history of superior performance by comparison with the self-professed disinterest of rulers, as a means to the discovery and enforcement of a fair solution. When legislators appear who can demonstrate their own transcendence of self-interest and superiority of understanding, then they might have reached an appropriate starting point for discussing the drawbacks of the universal political franchise ensuing from defects in the electorate.

The present states which call themselves democracies are all defective to varying degrees, sometimes enough to offset the theoretical advantages of a democratic system over a reform junta, for example. So it is not the deficiencies of the electorate but of the leaders that are matters for present concern. As for the future, the participation of a well-educated and well-informed electorate in the selection of its representatives may well engender enough further commitment to outweigh any imperfections in its rationality. But 'education for citizenship' is, of course, an absurdity without education in morality. Any country which does not recognize that morality has no foundation or justification except as a solution to the problems of social living will have great difficulty in generating good citizenship in either its citizens or its leaders. For the alternative accounts of morality are contradictory, inherently implausible, and only indirectly connected to social behavior.

In concluding these arguments for the universal moral franchise among men, it is important to recall the great advantages that automatically accrue from increasing the size of any cooperating group--increased total power, increased specialization possibilities, decreased unit cost of goods, etc.; plus the special advantages of a larger moral group--increased availability of unselfish help and friendship, decreased likelihood of knavery and unprofitable conflict, etc. The qualified extension of moral consideration into the non-human domain is justified in somewhat different terms, greater weight being attached to the benefits of positive reinforcement and less to the group productivity advantages, apart from the points discussed earlier. A quasi-morality is often extended to machines, e.g., by those who love their boats or cars. The case for this as an option is similar to part of the case for the animals: machines do not suffer, but they do respond to loving care, and make good pets besides.

With very complicated machines, not yet existing, full moral equality may be mandatory. Equality of political franchise has both moral and practical support, since it provides the individual with a defense of his own interests and the government with a representation of the populations' concerns.

We now turn to the problem of the practical consequences of the commitment to equality. Does it imply that one should love others' children as much as one's own, for example? It is often held that the ideal of treating all mankind as equal is self-stultifying since if we really worried as much about each of the starving thousands of distant lands as about the indigent poor of our own city, neither would benefit; we would have to send our aid to the far land, since a greater number with greater needs are there and for just that reason it would do negligible good.

But there is an excellent moral and practical basis for the adage "charity begins at home," although it does not support the extension to the conclusion that charity ends at home. First, it is absurd to suppose that there is ever an obligation to do something which is demonstrably futile. It is demonstrably futile to spread your little charitable gift amongst a very large number of the needs because none will benefit significantly. Your obligation is to determine the size of a significant contribution and allot as many of these as you can reasonably afford to the most needy individuals, or donate to an organization that does exactly this. Second, it is important that there should be the least possible wastage through administrative costs and corruption. This can usually be achieved by purchasing and often by administering the gift yourself, except when certain orgainzations are given special leverage, e.g., a dollar-for-dollar or transportation-charges-only call on surplus farm products. Hence there is a second good reason for local preference (assuming reasonable parity of individual need). You are in the best position to help your neighbors and hence have the strongest obligation to do so. Third, other emotional and moral springs besides the pure sense of duty can aid in providing the energy or motivation for giving; local pride, mutual friendship, the pleasure of seeing the good results you have brought about, etc. Less than perfect as we are, it is often sensible of us to employ against our weaker selves all the leverage we can develop from less noble sources. We should strive for the moral attitude, but we are not wrong to amplify the feeble signals of conscience with a feedback circuit of a more mundane kind. Fourth, some method of selection of moral tasks must be employed and there is merit in using one which has a tendency to increase the moral level of the recipient. And gratitude in the recipient can effectively be incubated into tangible moral output later by the presence of the benefactor. Fifth, there is a tiny element of moral sense as well as common sense behind the application of patriotic considerations to this problem. So long as the survival and welfare of one's own national or local group is important or strongly contributory to the furtherance of other good causes, so long is it morally appropriate to bend one's efforts first towards repairing its own defects in order that it may more effectively proceed, by means of example and practice, to more direct contributions. And apart from that lofty consideration, it is, sixthly, simply sensible to protect the welfare of the group which can most effectively protect or assist or tolerate you, and to a small extent this is involved in aiding local or national charity. Nor are such considerations immoral, for morality does not deny a man's right to self-protection and his own interests where they do not involve disregard of others. But it *is* obviously immoral to refuse to give foreigners surplus grain that will save them from starvation on the grounds that it will lower the world asking price, for lives or even basic health are substantially more important than profit. It is indeed indefensible to refuse aid in the form of other goods and services even though they *might* be used at home for relative luxury, although the need abroad is *very* much more acute. For even if one did not defend it explicitly and immorally by denying the moral equality of foreigners, the long-term effects of single-minded concentration on the lesser hardships of compatriots rather than the greater hardships abroad is an implicit denial of this postulate. Even prudential considerations count against moral isolationism, for the poor grow stronger eventually and do not remember kindly those who ate caviar rather than gave alms. And there are rich rivals to help them get stronger if we do not. In short, the international realm is increasingly indistinguishable from the interpersonal one. Where the balance of forces rapidly shifts and many issues are at stake, with some difference in the alliances on each, morality is not far behind prudence.

We normally distinguish three levels of moral performance; (i) refraining from gratuitous immorality; (ii) discharging obligations or duties, and (iii) acting meritoriously, nobly, etc. ('doing good works'). The distinction reflects itself in the combinations of praise and blame for doing or not doing these things. No praise is due one for not stealing a raincoat from the racks in the college corridor, and one is blamed for doing otherwise. One deserves some praise for keeping a promise when it has been inconvenient to do so, and will be blamed for not doing so. But to exist at subsistence level in order to support some waifs in Hong Kong is said to be 'above and beyond the call of duty'; to be a 'work of supererogation'; here praise is due, but blame for failure to act thus would not be thought appropriate. The distinctions are essentially a concession to man's limitations insofar as they go beyond considerations like those of the discussion on our obligations to neighbors v.s. strangers. A man who is moral in the strong sense cannot stop short at mere duty, he cannot excuse failure to do more, when he could do more, on the grounds that it is more than duty requires--at least, it is a very feeble excuse, as everyone recognizes by their embarrassment in turning down direct appeals for charity in worthy cases. Since we would go further, if we truly loved others as equals and since there are good grounds for doing that, there really is an obligation to go further, though clearly it is a less stringent than the direct obligations to do a clear duty.

When we are training children or attempting to train those not properly trained as children, we do praise them for not stealing or lying when something was to be gained by dishonesty, because this abstention represents a considerable achievement for them. And praise is not just descriptively appropriate for someone overcoming difficulties on the way to acting in a desirable way, it serves as a reward and thus aids learning. For just these reasons, in a company of highly moral men it would be inappropriate to issue praise for what now seem to us quite meritorious works, though their works would be none the less good works. In that company of men, to do only one's duty would be a sign of moral deficiency, disappointing, indeed, it would seem, blameworthy. Hence, in that company, our obligations would be greater. Thus the distinction between acts of obligation and of supererogation is chiefly dependent on the individual's capabilities. Now, we all have some long-run control over our capacity to be moral, and clearly have an obligation to increase it. So there is a perfectly good sense in which everyone has an obligation to do all the good he sensibly can, now, and a long-run obligation to do all that he could if he were as much better as he could (and should) be. In practical terms, this means that we are usually acting immorally in purchasing luxuries instead of contributing the money to those with very great need for the elementary necessities. This is a hard standard to meet, but a good one at which to aim. It is no harder to defend in utilitarian terms than in the religious ones which have previously led men to adopt it as an ideal. So long as we are weak, of course, it can perfectly well be argued that we need an occasional luxury to keep up our morale, or, in prospect, as an incentive to that productivity which indirectly benefits us all. But our 'need' for this is more a product of poor upbringing--or of laziness in thinking out an overall attitude to life and implementing it in a program of self-reform--than of anything essential to the nature of man.

A certain amount of the political enthusiasm for the right-wing position in the United States, with its low tax and anti-welfare emphasis, arises from the need for a rationalization of selfishness, just as a certain amount of the enthusiasm for the left, with its welfare legislation and a steeply graduated income tax, arises from the need to rationalize envy of the rich and powerful. The right wing's rationalization attempts to show that a true concern for the individual's rights and welfare would lead to a reduction of the role of centralized government and hence taxes. It inevitably fails, in those terms, because the left wing is not arguing for the desirability of government as such; it is only arguing for the amount of government that, in the light of the known limits of spontaneous justice and charity, is necessary to safeguard individual interests and rights. Conversely, the left's attack on the right as embodying disregard of human suffering is valueless at that level of generality because the right feels that in the long run human suffering is decreased by emphasis on individual responsibility and obligations, even if at first this means more suffering. The debate is essentially about a matter of fact--the relative effects of two different emphases--about which we have no conclusive evidence. Consequently, it tends to be dominated by the participants' emotional predispositions, and these in turn are markedly affected by the individual's selfish interests. The danger arises when it becomes widely believed by either side that this is an issue of fundamental values with regard to which the opposing position is essentially immoral, or at least anti-democratic. And who does not prefer to think of himself as a champion of liberty and equality, rather than of one side of a highly uncertain wager? In terms of this picture of the dispute, intemperance seems justified, manifesting itself in vicious attack on or censorship of the seditious doctrine. Indeed, with a little retaliation to aggravate the matter, detention, execution, or assassination of the subversives comes to seem a patriotic duty--and we see replayed the pathetic cycle of almost very new 'peoples' government which comes to power as a champoin of liberty to become in a few years the new tyranny. After all, communism, anarchism and conservatism are all identified by their theorists as embodying the goal of the withering away of the state. And governments owing allegiance to each of these ideals have turned out in practice to behave in very similar ways. We must consider the actual practices far more carefully than the self-applied labels.

Power is extremely corrosive. Against its corruptive effect there can only prevail the *deepest* moral convictions. And these arise in only two ways; from the fires of actual persecution or from the insights of a profound understanding of the lessons of an objective history and morality, an understanding which can only be attained from an educational experience wholly alien to most of the classrooms of the world's schools today. If we feed the children a *patriotic*--indeed, chauvinistic--history and a *religious* morality (or, rather, twenty different religious moralities as icing on a crudely materialistic set of values), and if both are taught in terms of slogans, hero-worship and romantic myths, we may expect negligible understanding of either side in the great internal and international disputes and hence little real motivation or capacity for compromise. For to understand the moral positions of most men is to see the extent to which they involve the same values as other men; and to understand one's own moral position is to realize how many tentative judgments of fact it involves, how many simplifications, how many compromises. That kind of understanding often provides the motivation for compromise. And to understand the process of moral argument requires that one have some skill in the evaluation of and hence the development of creative compromise. To understand completely is not to accept completely, but it reduces the likelihood of purely emotional rejection. A morality of abstract platitudes is empty; but a morality of dogmatic positions is full of danger.

Once more, in duscussing the problem of our attitude towards our fellow men we travel the route from general considerations through political ones back to the educational process. The case for morality is at its strongest when shorn of the complexities and rigidities we see from a certain station in a well-settled life; at its strongest when we are considering it as a viewpoint for an as-yet-unmolded individual whose luck and talents are as yet unclear, in short, for a child. But finally we must come back to the problem of the individual in the midst of life.

19. Attitude Control

Do we really have the power to become moral, apart from the reasons to want that power? Does our incapacity for change restrict the argument for morality to recommendations for the kindergarten curriculum?

We have already discussed the main elements in any answer to this question in the Responsibility chapter. It is certainly true there are limits on what we can change about ourselves--for example, by the time we are adults we cannot change our mathematical ability from very bad to very good, no matter now diligently we apply ourselves. But many 'mental abilities' can still be radically changed at almost any time; a good example is the ability to remember the names of people we meet or read about. "I have a terrible memory for names" only means "I lack the capacity to remember names, as of now"--it does not mean "I am incapable of learning (How to remember) names." Obviously, "I can't understand French" is in the same way an expression of short-term incapacity. (But cf. "I can't speak French with a native accent.") Equally obviously, to move nearer morality, some individuals have undergone radical reforms in the morality of their behavior, for example, some 'habitual criminals.' Can we all do this?

Almost all of us do change ourselves or allow ourselves to be changed morally: in either case we are responsible for the change. We gradually overcome the temptations that lead to the petty thefts and frequent lies of our childhood. We find ourselves able to give to an alumni appeal or even a remote charity (as opposed to a needy friend) without such difficulty as before, and indeed may occasionally start going out of our way to find such causes. Arguing with his children, whose side is often defended by his spouse, sometimes makes a parent more susceptible to appeals in terms of the rights of others, a tendency which has its converse in the tendency towards selfishness amongst long-time bachelors. Similar results may accrue from interactions with co-workers and be absent from the self-employed persons. And many people have found in their religion or their later reading an inspiration which has led them a long way forward on the moral path.

The task of changing one's character ('mending one's ways') is undoubtedly a formidable one, because the changes are slow and require sustained effort. On the other hand, even a very little effort pays off in a somewhat longer time, which is a very important difference from the situation involved in staying on a diet or exercise regimen, or giving up cigarettes. There, the minimum effort is considerable (too much for many people) and there are not only no returns for expending a lesser effort, but the failure probably weakens one's confidence in (and hence the likelihood of success in) future efforts. But all such tasks become much easier once they have been thoroughly explained, the difficulties--and the devices for handling them--made clear, and the fact that progress appears slow offset by stress on the importance of the small steps. In the end, of course, it is obvious that we can change our character because, as Aristotle observed some time ago, it is obvious that our standards are affected by the company we keep and it is obvious that usually we choose our companions. And perhaps it is also obvious that we can improve our characters because it is surely obvious that we can ruin them.

It is rather less obvious what company we should keep. There is an unfortunate tendency for the 'fine upstanding lad' (as the minister would say) to be the one that gets the minister's daughter pregnant. This is an expectable consequence of a young person's talent for acting the expected role plus the usual parent's--and university president's--extremely superficial conception of what the moral role amounts to. Nice manners to elderly aunts and a proclivity for Ivy League clothes cost little, pay well and fool the folks. Sticking with a highly unpopular stand on a clear issue of principle, ignoring grades in a worthless course when it is necessary if one is to do a really good research project in a good one, missing all the basketball games because they're boring, refusing to be fondled by strangers who happen to be old friends of one's parents, insisting on information about contraceptives at age sixteen--these are activities virtually guaranteed to upset the family but showing forty times the merit of the usual organization-boy who gets the American Legion prize at graduation.

Nor is it ever too late to change, to take up new friends and new interests that lead to new friends. To put it very simply, if one has not lost the use of one's reason one must concede there is room for self-improvement; if one has not lost one's intelligence, one can see ways in which it can be, slowly, done; and no one is incapable of the small efforts that will bring it about. Many of us are too lazy or self-satisfied to do anything--but these are not excuses, merely culpable deficiencies which themselves can be improved. For someone in this category, the best recourse is the roundabout route: if you don't have the strength to do what you concede you should do, you do have the strength to make a deal with someone who'll help you to do it in return for similar favors.

This deal is sometimes called marriage, other times part of friendship, the patient-therapist or the citizen-government relationship. In the mildest and most obligatory form the interest in morality and the attempt to improve one's responses to it manifests itself in the willingness to discuss moral decisions in good faith. For this exhibits respect for the point of view of others and a willingness to allow one's commitment to rationality to bear on one's moral behavior. The first is itself a mild form of morality and the second a mild way of improving one's moral performance by indirect aid.

But are the gains from a somewhat more moral life worth all this planning and effort if one is happy with the life one already has? Complacency with an immoral life is a sign of either ignorance or irrationality--or laziness, to the extent that that is distinguishable from irrationality. A salaried man who makes no provision for his retirement years may well be happy with his life, but that's simply a sign he's stupid. The long run gains of morality do not fit so readily into double-entry bookkeeping practice as does retirement income, but there is surely a close analogy between the economically destitute old man and the emotionally destitute old man who has lost the physical capacities for enjoyment of his own life and lacks the mental capacity to enjoy the lives of others or aid them in the ways still open to him. The ancient crone's cruel gossip provides her with pleasure from the misfortunes of others, though not a moral pleasure. But she cannot share it with the objects of her amusement, cannot aid them even with solace or advice, cannot participate in what entertains her except insofar as she espouses other, moral, values. And only the moral values and the eschewal of the others provide her with membership in the moral group with its many advantages. But the moral attitude is not merely old age insurance, nor is it merely insurance; it offers many advantages--and at no point does its case rest on the claim that one cannot be happy though selfish. It is true that people very often turn to religion through unhappiness, but no priest would argue that religion has nothing to offer the well and happy. The same is true of the defensible element in religion, namely, a rational morality.

Closely related to the general question of whether we can become moral is the problem of distinguishing wants from needs, or, more generally, justifiable desires from unjustifiable ones. In discussing many moral problems it is easy to see what most people want, and what action would best bring this about. But this is hardly the end of the matter; not only may people, even communally, want incompatibles, such as less taxes and more social security benefits, the pleasure of smoking and longer life, but they may also want what is immoral, such as the sacrifice of more maidens, gladiators, pagans, infidels, atheists, Jews, Christians, Capitalists, Communists or other kinds of animal. Another type of case arises where an extremely spoilt child will obviously be made much unhappier by not getting a disputed candy bar than the child from whom he is attempting to wrest it. In such cases we must always ask the long-term question: Is the present desire itself desirable? This is simply a special case of the problem about the selfish vs. the unselfish attitude; some attitudes are more desirable than others, either in selfish, or, later, in moral terms. Different solutions are appropriate depending on whether the desire is or is not alterable now or at some future time, and whether it was or was not alterable at some earlier time. For example, gratifying the strong desire of the spoilt child in the above example is usually undesirable since it encourages an undesirable pattern of behavior and attitude, that of selfish indulgence, a pattern which can be changed by withholding gratification. But if that desire was the desperate expression of an unusual and irremediable physiological need for sugar, we would take account of its intensity as against the otherwise better claim of the other disputant. Pilate must protest the mob's lust for crucifixion, cannot merely accept it as an ultimate fact, just as state governors today should disregard polls showing public support for the execution of murderers. The voice of the people is not the voice of morality, and killing a man to satisfy blood-lust or mistaken beliefs about the effects is just what governorships are made to be abandoned for. As Harry Truman once said: "The buck stops here."

It may be helpful to consider two problems of applied morality that involve these points.

1. How should the sadist be regarded and treated? Suppose that sadism is inherited, incurable and irresistable, none of which is generally true. Is the sadist culpable for beating an unwilling victim for pleasure? Yes, because (a) the habit is recognizable and recurrent and the sadist can place himself under restraint, (b) this kind of sadism is a practice which does not regard the rights of others as equal, hence is immoral. Is there any point to punishing him, since there is no possibility of changing him? Of course; his incurability is with regard to a disposition; it does not preclude responsibility for its unbridled manifestation. He could have avoided the crime and didn't, so he is responsible for doing what he knew to be--or should have known to be--immoral. He is, in short, not significantly different from the alcoholic who injures someone in a car crash when drunk. Our sympathies are sometimes more aroused by the more pathological nature of the case--but usually inappropriately. In fact,

sadism is by no means as severe as here supposed and hence the sadist is typically also immediately responsible. And even in a mixedly moral society, he is strikingly imprudent if he does not exploit the many ways of reducing the risk of manifestation.

2. Would we be justified in forcibly using brain-surgery to convert recalcitrant criminals or psychopaths to morality, (supposing we knew how to do this)? There is for most of us something peculiarly repulisve about altering a man's body, especially his brain, against his will. The commitment to respect the rights of others reaches its maximum strength in cases of violation of another's mental integrity against his will, for a strong reason; to change a man's nature is very like killing him. It means the end of the individual as he was and as he preferred to be. The continuance of the physical body may justify us in saying that murder has not been done, but, we feel, the morally significant entity is the personality, and to destroy that is to eliminate one of the members of the moral community. (Conversely, it is because the fetus has none as yet that the moral case against abortion is complicated).

Of course, there is another side to the question. Self-protection is, and clearly should be, an adequate justification for damaging someone else against their will. Could we not argue that society is simply protecting itself against the criminal in this way?

But self-defense is not a justification for killing someone when there are more merciful and readily available alternatives. For the recalcitrant criminal, there is always jail, which can be a most effective defense for society. While in jail it is of course perfectly appropriate, by open reasoning, to try to persuade the prisoner to reform. We may also undertake to remove any obstacles to reform, such as lack of a trade, or psychological blockages. There is no moral reason not to make the therapy, whether it's talk-therpay, work-therapy or surgical therapy, as attractive as possible in terms of remission of sentence and financial help for a fresh start. It is unlikely there would be many hold-outs against this kind of argument. But if there are, they maintain a basic right to continued existence or integrity which are amongst the most fundamental in our set of values. For that man there is no difference between a painless death and a radical change of personality with associated amnesia. But again, the long-run arguments have an easier time, and genetic engineering to prevent the birth of sociopathic or even socioapathetic individuals encounters no such difficulty, though there are others. In the short run, too, the practical questions are crucial and if the security of prisons became negligible because of changes in the restrictive skills of wardens or the escapist skills of prisoners, it might become necessary to swallow our present feelings in order to prevent more serious consequences. This is one of the moral issues where the right answer is highly dependent on our feelings and where these are clearly rather easily modifiable. Related examples concern the reactions to voyeurism and culturally unusual sex practices.

20. Paradoxes of Commitment

Before giving a brief summary of the conclusions of this chapter, we shall turn to some apparent paradoxes about the key element in the present approach, the concept of a rational attitude. From them we can get a clearer idea of the role of this key element, and a way to handle some important problems of applied morality.

As a first example, it should now be possible to see how it can be rational to adopt an irrational attitude. If one is undertaking to act as a spy in a foreign dictatorship, and if hypnotic techniques make it feasible, one might be well advised to have oneself indoctrinated with an attitude of respect or even reverence towards the dictator. During the interim period when one's task is to work up to a position of authority within the country's armed services, this commitment might be the only possible way of passing the loyalty tests required. If one knew that the process is quickly reversible and that the reversal will be carried out when your aid is needed, and the likely losses due to your behavior in this state will probably be heavily outweighed by the gains, the commitment to this belief is surely rational, one might say just because the belief itself is irrational. It is possible to give selfish reasons for adopting an unselfish attitude, as we have argued in this chapter. One can certainly describe the first kind of situation less paradoxically; one might say that the attitude adopted is the rational one, and that we must simply avoid the assumption that rational attitudes necessarily incorporate the beliefs best supported by the evidence, i.e., those which it would be most rational to adopt if one's dominant concern was being right. That is, beliefs which it is probably best for a particular man to hold may not be the beliefs which are most likely to be true. Similarly, one might handle the moral attitude paradox by saying that we must distinguish between reasons which are relevant for a rational selfish man and selfish reasons. Then we can say that the basic maneuver in the argument for the moral attitude consists in showing that a rational mortal cannot, ultimately, be purely selfish, that moral considerations are, without qualification, good reasons, etc. Yet the other formulation must be explored before it can be transcended. It is too plausible to be dismissed as a mere confusion, just as the idea that

"This statement is not true" must be either true or false needs to be explored before it can be transcended.

There are several related paradoxes. The paradox of conscience is one. One should surely always do whatever seems, on careful reflection, to be the right thing to do; but since we are all fallible, what seems to be right will sometimes turn out to be wrong; so sometimes we should do what's wrong. It should first be noted that our obligation to do what we believe to be right is entirely dependent upon the assumption that our beliefs are reasonably good indications of the truth of the matter. That is, we assume prior success in developing a good analytical moral sense or conscience. For it we know our conscience is very unlikely to be right, we certainly have no obligation to heed it. Conversely, insofar as we have good grounds for thinking it reliable, and no grounds for thinking that any other arbiter to which we can have access is more reliable, then we have good grounds for doing what our conscience dictates. Hence we have good grounds for doing what will sometimes turn out to be wrong, i.e., not to be the ideal action had we been able to foresee everything that actually happened, calculate correctly, etc. But, of course, this does not show we had good grounds for doing what we knew to be wrong. Our commitment to the promptings of our conscience needs both effort and justification; it is neither easy nor unconditional.

This paradox is exactly paralleled by one about belief. We should, it seems reasonable to suggest, believe what we think is best supported by the evidence. But long experience makes it clear this will sometimes mean believing something false. It appears to follow that we should believe some false propositions. But all that really follows is that what we should believe isn't guaranteed to be true, and the moment its error appears our obligation to believe it disappears. We never had any obligation to believe something (known to be) false, only something which was amongst other unknown properties false. Our obligations are to actions, beliefs, and so on, as they appear to us after careful scrutiny, using tested instruments; obligations cannot be determined by unknown properties.

With these cases in mind we can rather easily handle the so-called 'paradox of democracy.' Suppose that a long and bitter campaign is fought between a manufacturing group and consumers' representatives over passage of a minimum standards regulation which applies to chewing gum, and the manufacturing group wins the referendum because of a very successful and very extensive publicity campaign, although the data clearly indicate to the professional statistician that these substandard sweets are responsible for a serious rise in pre-teen stomach ulcers. In such a case, the majority have spoken, so in a democracy the law should not be introduced. But objectively speaking, the reverse is the case. Hence democracy is involved in the paradox of laws which should and should not be passed.

'Democracy' is in the same role here as a man's conscience or judgment in the earlier cases. It is only because we can give grounds for believing that *more* good decisions are made by a system of popular vote and representative government than by the alternatives* that we can even argue that what was voted should be done. It is perfectly clear it

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*The matter is actually somewhat complicated by the possiblility that fewer even if good *decisions* are made by a democratic electorate more good effects may occur, e.g., because of the greater pleasure of making their own decisions by comparison with having to follow orders.

will not always turn out to be the best choice, but still it ought to be done even though it ought not to have been voted. 'It' is not a (known-to-be) mistaken action, but an action which in fact happened to be wrong. The pinch in this case is perhaps a little sharper than in the preceding ones because even at the time of the decision it is objectively determinable that the decision is not the best one, in terms of the merits of the alternatives. But the result is the same: we stay with a commitment or attitude when (a) having a commitment to some decision process is on balance better than any alternative, e.g., deciding each issue by whatever method has the strongest support at the time and (b) in a particular type of situation we have good grounds for thinking that on balance the decision process to which we are committed is the best feasible.

It is a similar argument that led us to the solution of the difficulty about justice for a functional theory of morality, for there too we find an apparent contradiction between the decisions made by a procedure supposedly intended to maximize benefits to those it affects, and the direct calculation of those benefits. The same type of reasoning enables us to handle a range of cases from the death of Socrates to the decision whether to evaluate the virtue of acts in terms of intent or in terms of consequences. Socrates had the opportunity to escape the death penalty the law had decreed, but he declined to avail himself of it, expressing the view that his commitment to the laws should not evaporate as soon as they turned against him. The penalty was manifestly unjust, indeed almost unintended, and so one would think the commitment voided. Socrates rightly saw that the inertia of a commitment must carry us far past the point where we make the commitment revocable on each occasion, since else it cannot yield its great benefits. Whether we should be carried to accept quite such an extremity of injustice is not so clear. Whether Socrates' age or particular 'crime' makes the case substantially different would require much discussion; but the point of his poisiton is profound.

The great dilemma between judging the virtue of actions in terms of their motives or of their effects further illustrates the two-stage approach to commitments. We can only judge acts as virtuous if the motives are good--but a pure intent is not enough. It is a necessary condition for virtue, not a sufficient. The commitment to virtuous motives only has justification insofar as it tends to promote beneficial acts. In someone of great stupidity, or with absurd conceptions of what is beneficial for others, the results will be bad not good; and since this is foreseeable there has to be a supraordinate obligation on all to use only a demonstrably reliable judgment and otherwise to withhold judgment. To the extent that an agent is responsible for his or her failure to achieve these standards, to that extent virtuous motives do not establish virtue. Conversely and more obviously, good results do not make good actions. Interestingly, even actions done because of good results which were foreseen are not necessarily virtuous--for the actor may have been entirely careless or overly optimistic in his calculations so that it was pure luck that the good results eventuated. In each case we are moving the analysis back behind the motives and consequences to considerations which arise when the problem of justifying that motive (attitude, commitment, etc.) is seen in full light.

This kind of investigation is an important, and perhaps the most important, part of the analytical procedures recommended here; it remains only to summarize the conclusions, trying to use examples and perspectives we have not already exhausted.

21. Conclusions

The Ten Commandments do not tell us whether or when lying is better than stealing, and neither they nor the text in which they are embedded provide us with any good reason for believing them rather than the tenets of Islam. That is, they lack adequate specification of scope, order and foundation. The argument here has been that a comprehensive and defensible morality can be founded on considerations of its effects on the members of a moral society and in no other way. Long-run practical considerations indicate the desirability of certain attitudes such as keeping calm or obeying military orders or not acting hastily; similarly, long-run considerations of one's relationships with others indicate the desirability of the moral attitude, which is defined as the acceptance of the equal worth of all: in its passive form this means recognition of equality of rights and in its active form it involves love of others. Apart from the several direct arguments for the moral attitude, there is a vast back door to morality whose portals can hardly be avoided. Since morality as defined here offers important benefits for any member of a group if the rest of the group adopts it, there are good grounds for encouraging both this and the next generation to have moral training. And the benefits are sufficient, whatever one's initial selfishness quotient, to make support for moral training sensible even if the price is that one's own attitudes and behavior be affected by the sanction-system set up. The intermediate case between the direct and indirect arguments for morality is provided by the small group with whom one most frequently does or can choose to interact--the family, the circle of friends, the co-workers, colleagues or business associates--where the tendency of one's own moral commitment to bring about the same in others is quite significant, and where any shifts towards morality bring about more frequent and profound benefits for the group than for strangers. Of course, to deliberately restrict equality of consideration to the small group on the grounds that one thereby maximizes gains is simply immoral and irrational for the reasons given in the discussion of the franchise.

Given the argument which leads to the basic moral attitude, a related argument leads on to certain associated moral attitudes such as the attitudes of reverence for justice and for honesty, each being independent but secondary values. It is demonstrable that treating these values as independent is in the long run better for the members of the moral community than attempting to make all decisions in terms of the sole criterion of maximizing benefit for the members. Moral problems are then problems of determining the best action, etc., from the moral point of view, i.e., the point of view founded on equal consideration of all, and hence involving independent appeal to this set of secondary values. Unconscious or conscious perception of the advantages of appeal to such a system explains the common elements in different moralities; emotional and cognitive deficiencies as well as circumstantial variations explain the differences.

Since the account given is of the best long-run attitude and system, it is not a guarantee of a coincidence between the moral and the rational attitude for everyone whatever their circumstances and background at a particular moment. Indeed, as just noted, even a group may be rational without being moral--in the short run; but not a tribe or a nation or mankind, since these are entities with a long time-dimension. Invincible power, a short life or immortality, full foreknowledge or lack of education in the individual can contribute to widening the gap between rationality and morality, and in the limit case of a supremely powerful rational being, caring about other beings is simply a matter of taste not reason, and thus doing the will of such a being in no way makes it probable that one is doing good.

So we have provided a rational basis for morality; but for many that will be less than enough to spur them to action. For them there will still be the need for inspiration and above all for inspiration by example. And that is the role the great religious and moral leaders have always served. If we can enlist their inspiration while rejecting much of the moral philosophy of their later followers we shall have a system of morality with both passions and principles that recommend it. But setting a good example is not the way to teach ethics, for there must be a way for the observer to tell that the example _is_ good, i.e., an understanding of the foundations of the system. A sinner who has acquired that understanding is not wholly without merit beside the saint who has not.*

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*A comment in terms of the traditional philosophical positions about ethics may be helpful to some readers. We are here accepting the categorical nature of the moral imperative that Kant stressed and trying to give rational grounds for adopting--though slightly limiting the range of--that categorical imperative. Accepting the spirit of the utilitarians, we try to avoid their problems by extending considerations of utility to the underlying attitudes and values with which they began their conclusions of utility--and in so doing we are able both to resolve the ambiguity in their formula and to incorporate the point of view of the deontologist. We avoid the letter of the naturalistic fallacy by avoiding the mistake of thinking that capsule definitions of central concepts in a vast system are possible, the defense which makes the valuable concepts of theoretical physics immune to the ravages of the operationalist. But, of course, we sin in the spirit of naturalism in that we derive moral principles from the facts of social and personal life, as the best strategy with which to handle the dilemmas and exploit the possibilities of life. Yet we need not say that good is a natural property in the sense to which G. E. Moore rightly took exception. Nor do we have to say that what man wants is fundamentally good; it is often evil, and more often morally neutral; but still it is the moving power of morality, just as the desire to win, while not good or bad strategy in chess is presupposed by all strategy and generates the 'ought' of good play from the 'is' of the pieces' positions. We try to render more plausible and then to connect the Platonic and perhaps Aristotelian endeavors to show that the good life for the individual is the moral life with their own and the later social contract theorists' recognition of its advantages for the group. The attempt to rise from the selfish to the unselfish point of view, in the terminology of this chapter, is the counterpart to the theologian's description of the struggle from original sin to the path of grace.